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A DESCRIPTIVE STUDY OF THE ADMINISTRATIVE BEHAVIOUR OF NURSING DEANS IN CANADIAN UNIVERSITIES

by

© KATHRYN JANE NIGHTINGALE HANNAH

A THESIS
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
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Dedication

This work is fondly dedicated to my husband, Dr. Richard S. Hannah, and to my sons Richard Robert and Sean Michael. Without their unswerving faith, constant encouragement and unbounded love, this dissertation and the academic preparation leading to it would have neither begun nor been completed.

Abstract

The purpose of this study was to develop a descriptive profile of the administrative work behaviours of nursing deans in Canadian universities. This descriptive profile of one group of university administrators provides insights into a previously unexplored aspect of higher education administration by providing information of a qualitative nature about daily managerial activities, the purpose of those activities and how those activities compare with the activities of other types of managers.

Accepted techniques and methods for structured observation field studies were used. The research process involved three phases: gaining access to the settings and subjects of the study; collecting descriptive and observational data; and data analysis including the development of propositions.

The small sample size and the qualitative characteristics of the data prohibited the use of statistical treatment of the data for purposes of generalization. However, the use of composite totals, interview transcripts and molar data permitted collective description of the administrative behaviour of a group of Canadian Deans of Nursing. Low inference level data were used to describe the media used by the deans in conducting administrative activities and the people involved in those activities. High inference level data were used to describe the purpose of the deans' administrative activities.

The study indicated areas of commonality among the activities of deans of nursing, business executives and school superintendents. It also suggested that other types of activities were unique to deans of nursing.

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Chapter 1

INTRODUCTION

Historical Perspective

The traditional universities of Europe possessed a heritage of autonomy and self-government, and maintained small enrolments and even smaller numbers of faculty members. Thus, there was little recognized need for an administrative officer other than the President (or Principal, Master, or Rector, as he was also known). The early universities of colonial North America were patterned on these traditional European universities and possessed similar administrative structures. Gould (1964:2) speculates that:

> Deanships were late in appearing because the president could handle all administrative affairs when colleges were small; because until the astoundingly rapid growth of the natural sciences in the twentieth century one man could still know enough about the several academic disciplines to make reasonable assessments of the proficiency of faculty personnel; because presidents were jealous of their prerogative and did not wish to share them; or because, given a willingness to share, there was too little money to pay faculty salaries, let alone that of an additional administrator.

Eventually, however, a second level of administrative officer was introduced into the administrative structure in North American universities. According to Brubacher and Rudy (1958:322), the first academic dean -- Professor Ephraim Gurney -- was appointed at Harvard in 1870. This appointment was followed by a proliferation of similar second level administrative appointments at other universities. Brubacher and Rudy (1958:353-353) consider the 1890's as the median decade for the inception of these academic deanships in North America.

Concurrent motivation for the introduction of second level administrators into the governance of universities in North America was provided during the middle of the nineteenth century by the movement of the professions of law, medicine, and theology away from the apprenticeship preparation of practitioners and toward professional preparation at universities. Corson (1960:74 and 1968:29) indicates that, with the establishment of professional schools within the universities, administrative officers were appointed for each of these new academic units.

Early in the twentieth century, the North American universities proceeded to deviate further from the traditional European university model with its four great faculties of law, medicine, theology and arts. Brubacher and Rudy (1958:377) indicate that, as the twentieth century proceeded:

> Schools of journalism, education, pharmacy, nursing, business, public health, agriculture, library service, and public administration came . . . to be accepted as proper and accredited parts of the academic structure.

With the arrival of each of these new professions on the campuses of the universities in North America, additional second level administrative appointments were made in order to facilitate the governance of the respective individual institutions of higher education. The multiformity of titles by which these administrative officers came to be known and of the duties for which they were delegated responsibility is reflective of the origins, traditions, history, objectives, resources, and personnel of each individual institution (Gould, 1964:9).

As North American universities grew and expanded, the following contributed to the emergence of higher education as a legitimate area of research endeavour: institutional histories; the evolution of institutional research as a means of better understanding how individual institutions functioned; the impetus from accrediting bodies and philanthropic foundations for institutional self-studies; and the evolution of the testing, counseling, and guidance movements (Dressel and Mayhew, 1974:7-9). As higher education became a recognized field of study, interest in examining the internal administration of universities also rose. The earliest empirical studies of the academic deanship were those reported by Reeves and Russell (1929 and 1932). In spite of the passage of over one hundred years since the appointment of the first dean, and over fifty years since the first studies of the deanship were conducted, the role, activities, attitudes and values of the deans have not been well researched (Peterson, 1974 and Dupont, 1968:10). In particular, the deanship in the professional faculties has been virtually unstudied.

Purpose of the Study

The purpose of this study was to develop a descriptive profile of the administrative behaviour of deans in Canadian university nursing education programmes. A structured observation, field study approach was used to generate a description of the work behaviours of deans of Canadian university nursing education programmes. The study was undertaken in the context of developing insights and generalizations to contribute to the theory base of organizational behaviour in both educational administration and general administration.

Justification for the Study

The study of the administrative behaviour of Canadian deans of nursing has the potential of contributing to greater understanding of both educational administration and general administrative theory. In universities which grant baccalaureate degrees in nursing, the senior administrative officers of the academic units charged with the responsibility for nursing education are the acknowledged leaders of the academic endeavours in which students and faculty are engaged. According to Mintzberg's (1973:3) definition of the term manager, i.e., "those people formally in charge of organizations or their subunits," the deans of nursing are also managers of academic units. As managers of academic units, the deans of nursing in Canada influence the preparation of nurses for practice, and thus, via the programmes' graduates, deans exert indirect influence on the health care of Canadians. In spite of the prominence of nursing deans in the nation's postsecondary and health care systems, little is known about their managerial activities, the purpose of those activities, or how those activities compare to the activities of other types of managers.

At present, five of the 24 university schools of nursing in Canada are without deans. This large number of vacancies and the crisis in filling these vacant positions is the result of a combination of three factors. The first factor is the dearth of nurses in Canada who are academically credentialled at the doctoral level. Stinson (1979:16) states:

> only some sixty Canadian nurses hold doctoral degrees. . . CNA [Canadian Nurses Association], CAUSN [Canadian Association of University Schools of Nursing], and the Canadian Nurses' Foundation, regard the paucity of doctorally-prepared nurses in Canada as a major crisis.

The second factor which contributes to the current difficulty in filling these vacant positions is that an even smaller number of nurses are academically credentialled at the doctoral level in educational administration. The final factor is the rising average age of the incumbent deans of nursing, many of whom will be retiring in the near future. With the imminent development of a doctoral programme in nursing in Canada, the Canadian university doctoral programme(s) will most likely prepare the future deans of nursing in this country. A description of the administrative behaviours of nursing deans could assist the development of that portion of the doctoral curriculum which addresses nursing education administration.

The Canadian Association of University Schools of Nursing is presently in the process of developing a procedure for accrediting university nursing education programmes. The model which is being used attempts to remedy the primary problem in previous accreditation models, namely, the quantitative nature of the criteria, by developing a qualitatively based evaluation process. To date, only preliminary effort has been directed towards the development of accreditation instruments related to the administrative component of the accreditation process. This is partly due to the fact that no descriptive, qualitative studies exist on which to base qualitative evaluation for accreditation purposes.

Significance of the Study

Significance for Theory

Based on previously published findings integrated with the results of his own empirical studies, Mintzberg (1973) identified the characteristics of managerial work and the content of managerial work. The characteristics of managerial work were derived from previous empirical findings and supported by Mintzberg's studies of five chief executives. The characteristics of managerial work identified by Mintzberg (1973:28-53) were as follows:

1) much work at an unrelenting pace;
2) activity characterized by brevity, variety, and fragmentation;
3) preference for live action;
4) attraction to the verbal media;
5) relationship to a variety of contacts -- superiors, outsiders, and subordinates; and
6) interplay between rights and duties.

Based on his inductive analysis of intensive observation of five business executives, Mintzberg (1973:54) classified the content of managerial work into ten roles. He (Mintzberg 1973:92-93) then grouped the ten roles which evolved from his findings into three areas as follows:

Interpersonal Roles

- Figurehead
- Leader
- Liaison

Informational Roles

Monitor
Disseminator
Spokesman

Decisional Roles

Entrepreneur
Disturbance Handler
Resource Allocator
Negotiator

Mintzberg's characteristics of managerial work and managerial roles identify commonalities in administrative behaviours among business executives. March (1974:17-44 and 178:217-251) suggests that Mintzberg's work might have applicability and utility for educational administration. Duignan (1979) studied a population of school superintendents in Alberta using a similar methodology to Mintzberg's, and reported findings which were consistent with and supportive of Mintzberg's conclusions. To the best of the author's knowledge, observational studies of administrative behaviour in the university setting, generally, and in university nursing education programmes, specifically, have neither been undertaken nor reported. Additionally, both Mintzberg and Duignan speculated as to the temporal influences on managerial work but neither documented these influences through his observations. No studies utilizing the technique of repeated observations to include the possible effects of temporal influences on administrative behaviour were found. Thus, observational findings of the managerial work of deans of nursing in Canada at distinctly separated time intervals in the academic year may enhance the understanding of educational administration theory and general administrative theory by filling an apparent void in the published literature of organizational behaviour.

Significance for Practice

The practical significance of this study lies in its provision of a previously unavailable qualitative description of the administrative behaviour of deans of nursing. In the future, the results of this study might facilitate the development of:

1) evaluation instruments for use by:
    a) the profession (CAUSN) in establishing accreditation standards;
    b) the institutions in improving merit, promotion, and recruitment practices and policies;
    c) the individual in guiding personal professional development;
2. curriculum content in doctoral programmes in relation to those components which address the preparation of nursing education administrators;
3. improved organizational environments by exposing faculty members to an analysis of the decanal role in several institutions.

Delimitations

In designing the study, the investigator imposed the restrictions which are discussed in the following paragraphs as delimitations on the study.

The population for the study was confined to deans of nursing in English-speaking Canadian universities. Because of the multiple forms of titles in universities, the title "Dean of Nursing" was defined, for purposes of this study, as the senior administrator of the academic unit charged with the responsibility for the nursing education programme within the university. The titles "Director" and "Chairman" were considered to be synonymous with the title "Dean." The population from which the sample was selected included only incumbent deans of those university nursing education programmes offering generic degree programmes in nursing, either Baccalaureate or Master's (see Appendix A). Thus, acting deans or deans of programmes offering only post-R.N. baccalaureate programmes were excluded from the population for the study.

Similarly, the format for labelling academic units in Canadian universities is highly diverse. Therefore, the label "Faculty of Nursing" was used to designate the university academic unit that is charged with responsibility for offering the generic course of studies leading to the conferring of a degree in nursing. Academic units identified as "Departments of Nursing," "Schools of Nursing," or "Faculty of Health Science" were considered to be equivalent to the label "Faculty of Nursing," for purposes of this study.

The focus of the study was on the content of the nursing deans' work -- the activities to which they devoted their working days. It considered only what they did and why they did it, NOT how they did it or how well they did it. The administrative styles of the deans were neither considered nor evaluated in the study.

Since only the deans' administrative behaviour was considered, the organizational structure of the universities and of the various provincial agencies with which the universities interact was judged to be beyond the scope of this investigation. Thus, neither the organizational structures of the institutions in which the deans functioned nor the organizational structure of the provincial agencies (e.g., health or higher education) with which they interacted were considered in the study.

The time, distance, and expense involved in conducting the study permitted sampling only two time periods during the calendar year; therefore, visits to each subject were conducted at six month intervals. The spring visit (April) occurred between academic sessions. The fall visit (October-November) occurred during an academic session.

The observational field study methodology was chosen because this technique can provide in-depth data for a detailed analysis of the deans' administrative behaviour. However, the use of this methodology necessitated the limitation of the number of subjects in the study to five deans and a total of 30 days of observation. This compared favourably with the observation period used in other investigations. Mintzberg (1973) observed five executives for a total of 25 days and Duignan (1979) observed eight school superintendents for a total of 34 days.

Limitations

The investigator recognizes and acknowledges the limitations of the study which are discussed in the following section.

The fact that all of the subjects of the study were female was a limitation of the study. However, at the time that the study was conducted, there were no male Deans of Nursing in Canada and, in fact, there were rarely male faculty members in university nursing programmes in this country.

The investigator recognized the potential in this type of methodology for subjective interpretation by the observer of the deans' activities, for example, as Duignan (1979:9) points out, "another researcher watching the same behaviours might well produce a different kind of analysis." The investigator incorporated the following measures into the design of the study to minimize the effect of this subjectivity:

1) the use of established structured observation methods adapted from Mintzberg (1973) and Duignan (1979);
2) structured interviews with the subjects;
3) pilot observations of one dean to test the recording, coding, and interview techniques of the investigator;
4) the use of carefully defined operational definitions of all terminology used in the recording and coding processes; and
5) informal checking of the investigator's perceptions with the subjects.

The presence of the investigator might have caused the subjects to alter their usual pattern of behaviour. However, because many of the deans' activities involved other individuals and because the study was descriptive rather than evaluative, the probability of the deans' altering their usual mode of behaviour, either consciously or unconsciously, is low. In an effort to minimize any effect of her presence the investigator undertook to:

1) provide the subjects with a detailed understanding of the project in advance of their consenting to be subjects (see Appendix B);

2) protect the anonymity of each subject;
3) brief each subject at the beginning of each observational period;
4) maintain an unobtrusive, non-judgmental presence; and
5) use a candid, cooperative, and amicable approach with each dean.

The delimitations on the size of the sample and on the number of observational visits with each subject imposed a limit on the generalizability of the results. Nevertheless, random selection of the subjects and the comprehensiveness of the data gathered with the field study technique warranted the production of propositions concerning the nature of the work of Deans of Nursing.

Organization of the Thesis

This introductory chapter has presented an historical perspective; the purpose, justification, and significance of the study; and its delimitations and limitations. The next chapter provides a review of relevant literature and the development of the conceptual framework for the study. Chapter 3 outlines the methodology used in conducting the study. Chapter 4 presents an analysis and description of what the dean does and with whom, while Chapter 5 provides an analysis and description of the purposes of the dean's activities. In Chapter 6 the findings are discussed and in Chapter 7 a summary of the study is presented as well as a discussion of the study's conclusions and implications for future research and for the theory and practice of educational administration.

Chapter 2

LITERATURE REVIEW

The purpose of the literature review was to provide a context for the present study in relation to prior research and theories. Thus, the literature chosen for inclusion in this chapter was confined to administrative behaviour. The selection of literature was guided by the following questions: what is it that an administrator of a university nursing education programme does; what are the responsibilities, tasks, and functions of the dean in the process of administering or managing the nursing unit of a university; to what activities does the dean of nursing devote her working day and more importantly what are the purposes of those activities? In this chapter the literature which was reviewed and selected is organized into the three broad areas of general administration, educational administration, and nursing education administration. Content in each of these three areas was subdivided into the topics of prescriptive and advocacy, leader behaviour, decision making, and content of administrative work. Figure 1 illustrates the organization of the topics and their subdivisions within this review of the literature. The concepts relative to the principles, processes, and functions of administration are reviewed in the sections entitled prescriptive and advocacy literature. These sections present both empirical studies and the reflections of authors on their own personal experiences or observations. In the remaining sections, i.e., leader behaviour, decision making, and content of administrative work, the author has usually confined the literature review to reports on empirical studies.

	TOPICS		
SUBTOPICS	Administrative Behaviour	Administrative Behaviour: Education	Administrative Behaviour: Nursing Education
Prescriptive and Advocacy	X	X	X
Leader Behaviour	X	X	X
Decision Making	X	X	X
Content of Managerial Work	X	X	X

FIGURE 1 The Organization of Topics and their Subdivisions in the Review of the Literature (X indicates topics and subtopics discussed in the review of the literature.)

Studies of Administrative Behaviour

Prescriptive and Advocacy Literature

The principles, processes and functions of administration were prescribed or advocated in several ancient civilizations. In the Biblical book of Exodus (Chapter 18, Verses 19-23), Jethro counsels his son-in-law, Moses, to delegate authority using the exception and scalar principles. George (1972:viii,11-12) reports that, circa 1100 B.C., the Chinese constitution of Chow prescribed the use of the principles of organizing, planning, directing, and controlling in governing the country. In early Greece, according to George (1972:15-16), Plato prescribed the principle of specialization and Socrates advocated the concept of the universality of management. Further documentation by George (1972:24-26) indicates that, during the period of the Roman Empire, Diocletian governed using the principle of delegation of authority and Cato advocated that farm overseers (managers) should perform the functions of supervision, discipline, human relations, and planning ahead. George (1972:27) speculates that the failure of these early civilizations to benefit from the experiences of their predecessors was probably due to "inadequate records, poor communication, and failure to analyze the reasons for nonsuccess." However, he (George, 1972:27) concludes that:

> Evidences of managerial practices clearly indicate. . . that some principles of management were recognized in these early times and communicated at least locally on a how-to-do-it basis.

The medieval period produced little documented progress in managerial thought. However, Machiavelli, diplomat and advisor to

Florentine princes, recorded his observations of the management of affairs of state. Machiavelli is credited by George (1972:44-47) with articulating the management principles of reliance on mass consent, cohesiveness, leadership, and will to survive. These principles, according to George (1972:46), represent "one of the first published pronouncements of fundamentals basic to all organized endeavours."

In the modern era of administration and management, Henri Fayol was the first author to present a comprehensive theory of management. In discussing Fayol's contributions, Pugh et al. (1973:65) state that Henri Fayol:

> is the earliest known proponent of a theoretical analysis of managerial activities -- an analysis which has withstood . . . critical discussion . . . and provided a system of concepts with which managers may clarify their thinking about what it is they have to do.

In his managerial capacity at the S. A. Commentry-Fourchambault mining company, Fayol was able to apply and test his ideas about management. He believed that his system of management could be both taught and learned. Consequently, in 1916, Fayol published his ideas in Administration industrielle at générale in which he outlines principles on which effective management should be based and the functions of managers. Fayol (1949:19-20) states that the principles on which management should be based are as follows:

1. Division of work.
2. Authority and responsibility.
3. Discipline.
4. Unity of command.
5. Unity of direction.

6. Subordination of individual interest to the general interest.
7. Remuneration.
8. Centralization.
9. Scalar chain.
10. Order.
11. Equity.
12. Stability of tenure.
13. Initiative.
14. Esprit de corps.

The activities (functions) which comprise all managerial activity, according to Fayol (1949:97) are planning, organizing, commanding, coordinating, and controlling. These five concepts continue to exert pervasive influence even on contemporary authors (Sears, 1950; Terry, 1953; Urwick, 1956; Tead, 1959; Newman, 1963; Koontz and O'Donnell, 1964; Robbins, 1976) who continue to include these basic tenets of administrative behaviour in their books.

At approximately the same time that Fayol was writing, the work of Frederick W. Taylor, the Father of Scientific Management, was becoming popular in North America. Taylor espoused the virtues of management based on comprehensive analysis rather than intuitive, rule-of-thumb evaluations. Taylor was the first of the classic theorists of the modern era to advocate the use of the scientific method in the study and practice of management. An engineer by training, Taylor based his theories on his experience as a foreman and chief engineer at Midvale Steel Works and on experiments he conducted while employed at the Bethlehem Steel Works and while working as an independent consultant. In these experiments, Taylor (1947:117-118) first selected several workers who were particularly skillful at performing the task to be analyzed. He then studied the precise series of motions and the implements used, utilizing a stop watch. Having identified the one best way in which to perform the task, Taylor proceeded to systematically redesign the task; he then offered incentives to the workers who implemented his method for performing the task. From these experiments, he developed four management duties which constitute the basic principles of scientific management. According to Taylor (1911:36-37), the manager must:

> 1) develop a science for each element of a man's work, which replaces the old rule-of-thumb method;
> 2) scientifically select and then train, teach, and develop the workman, whereas in the past he chose his own work and trained himself as best he could;
> 3) heartily cooperate with the men so as to insure all of the work being done in accordance with the principles of the science which have been developed; and
> 4) equally divide the work and the responsibility between the management and the workmen. The management take over all work for which they are better fitted than the workmen, while in the past almost all of the work and the greater part of the responsibility were thrown upon the men.

Drucker (1974:24) states that:

> It is fashionable today to look down on Taylor and to decry his outmoded psychology, but Taylor was the first man in the known history of mankind who did not take work for granted, but looked at it and studied it. His approach to work is still the basic foundation. . . . Taylor's hope -- and it has been largely fulfilled in the developed countries -- was to make it possible to give the laborer a decent livelihood through increasing the productivity of work.

Taylor and Fayol worked on different continents, in different languages, and from different perspectives (Fayol, from the manager down and Taylor, from the worker up). However, George (1972:115) concludes that "their work was complementary." It remained for Gulick and Urwick to bridge the transition between the classical and human relations schools of management thought by codifying the writings of these and other early authors. Recognizing similar lines of enquiry and analogous principles among the works of early authors (Fayol, Taylor, and Follett), Gulick and Urwick (1937) define these similarities, correlate them, and consolidate them in a comprehensive fashion. Gulick (1937) also presents, for the first time, the well known acronym POSDCoRB which was heavily influenced by the work of Fayol. Gulick coined this acronym to describe the important managerial functions of planning, organizing, staffing, directing, coordinating, reporting, and budgeting.

In the process of analyzing organizations from a sociological perspective, Barnard (1938:217) defines the functions of executives as providing the system of communication, promotion of the securing of essential efforts, and formulating and defining purpose. These functions, according to Barnard (1938:215-216), constitute executive work which he defines as "the specialized work of maintaining the organization in operation."

Follett (1941) was first to consider the use of principles from psychology and sociology in relation to administration. She anticipated the human relations school of thought in administration by some ten years. Follett emphasizes that the manager's job is to harmonize and coordinate group efforts. The manager accomplishes this through the use of four fundamental principles of coordination:

1) coordination by direct contact;
2) coordination in the early stages of planning or policy making;
3) coordination as the interrelationship among factors;
4) coordination as an ongoing process.

Pugh et al. (1973:104) state that:

> The basis of Follett's thinking is the concept of partnership. The core of her contribution is the proposition that in a democratic society the primary task of management is so to arrange the situation that people cooperate readily of their own accord.

In spite of Follett's work, the major impetus for the dissemination and popularization of the human relations school of managerial thought came as a result of the Hawthorne studies which were conducted by Elton Mayo. These studies, which prescribed new functions and processes for management, had a profound and pervasive influence on administration. In their authoritative review of the Hawthorne studies, Roethlisberger and Dickson (1939) summarize the results of the studies in the following statements: workers respond to management as an informal group; worker productivity is controlled by social norms more than by physiological capacity; the informal organization of the workers is used as protection from arbitrary management decisions; and informal social organizations among workers interact with management. For management, the implications of the Hawthorne studies, according to George (1972:137) included assuming "a new role in dealings with employees"; developing "a new concept of authority and right to command"; and fostering "a new social order based on the individual's cooperative attitude and the system of coordinative organization and communication developed by management."

The resulting fragmentation and lack of integration that developed among the various schools of managerial thought is deplored by Litchfield (1956) and Koontz (1961) among others. Litchfield (1956:11) proposes a unified theory of administration, in which he promotes the conceptualization of the administrative process as:

> a cycle of action which includes the following specific activities:
> A. Decision Making
> B. Programming
> C. Communicating
> D. Controlling
> E. Reappraising.

Koontz (1961:174-188) identifies six main competing schools of management thought: management process; empirical; human behaviour; social system; decision theory; and mathematical. Like Litchfield, Koontz (1961:187) advocates a comprehensive and unified theory of management:

> Management may be explained, practice may be improved, and the goals of research may be more meaningful if we encourage attempts at perceptive distillation of experience by stating principles (or generalizations) and placing them in a logical framework.

Studies of Leader Behaviour

Porter, Lawler, and Hackman (1975:422) imply that leader behaviour is the manner in which "leaders behave in organizational settings to increase the effectiveness of the individuals and groups for which they are responsible." Katz and Kahn (1966:302) define three major components of leadership: (i) an attribute of an office or position; (ii) a characteristic of a person; and (iii) a category of actual behaviour. Similarly, Behling and Schrieshim (1976:295) identify three areas in the research on leadership:

> In the first, researchers attempted to determine the traits and qualities of effective leaders and to develop a trait theory of leadership which held in all situations. The second phase, behavior theory, involved both attempts to determine the major types of behaviors that leaders display towards subordinates and to determine their effects on group performance and satisfaction. The third and final phase, situational theory, involves viewing leadership as the results of interaction among (1) either the leader's traits or behaviors, (2) his subordinates, and (3) the situation.

With reference to the first phase of leadership research noted above, Stogdill (1974:4); Porter, Lawler, and Hackman (1975:423); and Hoy and Miskel (1978:177) all conclude that the trait theories generally contributed little to the understanding of leadership.

In the second phase of the research on leadership (as defined by Behling and Schrieshim above), various groups of investigators attempted to develop the theoretical base and provide insight into the nature of the relationship between style of leader behaviour and subordinate performance. The most noted of the leader behaviour studies are the Ohio State Leadership Studies which were aimed at describing the major dimensions of leader behaviour and determining the relationship between these dimensions and employee productivity and morale. The instrument which was developed to measure the dimensions of leader behaviour was the Leader Behavior Description Questionnaire (LBDQ). After the LBDQ was administered to a number of subjects in a variety of organizational settings, such as business, industry, the armed services, education, and government, two relatively independent dimensions of leadership style emerged -- initiating structure and consideration. In reviewing the Ohio State studies, Hoy and Miskel (1978:182) describe these two dimensions in the following fashion:

> Initiating structure is leader behavior that delineates the relationship between the leader and his subordinates and, at the same time, establishes defined patterns of organization, channels of communication, and methods of procedure. Consideration is leader behavior that indicates friendship, trust, warmth, interest, and respect in the relationship between the leader and members of the work group.

At the University of Michigan Survey Research Center, leadership studies were conducted concurrently with the Ohio State Studies using a sample drawn predominantly from among the employees of business and industrial organizations. These studies also identified two separate and independent dimensions of leadership -- employee orientation and production orientation. According to Hoy and Miskel (1978:189), a leader who is employee-orientated considers employees as "individuals of intrinsic worth, takes a personal interest in them, and accepts their unique need-dispositions and individuality;" whereas, a production-orientated leader "emphasizes the mission or job to be done and the technical aspects of the job."

At approximately the same time, the Harvard Laboratory of Social Relations was studying, under laboratory conditions, the social behaviour of small groups of college students who were assigned problems to solve. The findings of these studies again revealed two separate leadership roles: task leader and social leader. In commenting on this study, Hoy and Miskel (1978:189) describe the two roles as follows:

> The task leader keeps the group engaged in the work, whereas the social leader maintains unity in the group and keeps group members aware of their importance as unique individuals whose special needs and values are respected.

Using different methodology, subject populations, and methodologies, the three preceding investigations concur in their findings of two independent leadership parameters. Hoy and Miskel (1978:180) provide the table reproduced as Table 1, in support of the following statement:

> Theory and research are replete with various frameworks for examining the important aspects of leadership behavior. Most conceptualizations of leadership are multidimensional, that is, supporting at least two distinct types.

The third phase of the study of leadership, as defined above by Behling and Schrieshim (1976:295), focuses on the way in which leader behaviour and leader effectiveness vary in different situations. The two most prominent theories of situational leadership are the Contingency Theory (Fiedler, 1967) and the Path-Goal Theory (House, 1971). The basic hypotheses of Fiedler's model (1967:9) are:

3

1) Leadership style is determined by the needs the individual seeks to satisfy in the leadership situation.

2) The effectiveness of the group's performance is contingent upon the appropriate matching of leadership style and the degree of favorableness of the leadership situation for the leader; that is, the degree to which the situation provides the leader with influence over his workers.

Fiedler identifies two contrasting leadership styles -- effective task completion and successful interpersonal relations. House presents leader behaviour parameters which resemble those of the Ohio State studies, i.e., initiating structure and consideration.

In a critique of the studies of leadership behaviour, Mott (1972:184) challenges the studies because the categories of leadership behaviour which were developed were not mutually exclusive. He proceeds to state:

> Furthermore, any given activity can be interpreted variously, depending upon the situation in which it occurs. These reasons are all theoretical, but there is also one very important practical reason for concentrating on specific activities: the leader who tries to apply social science findings in practice can do so more readily and more effectively if he can adopt specific practices, rather than categories of practices.

Table 1

Dimensions of Leadership: Comparisons and Similarities

Theorist	Concern for Organizational Tasks	Concern for Individual Relationships
Barnard	Effectiveness	Efficiency
Etzioni and Parsons	Instrumental Activities	Expressive Activities
Cartwright and Zander	Goal Achievement	Group Maintenance
Getzels and Guba	Nomothetic	Idiographic
Halpin	Initiating Structure	Consideration
Kahn	Production Orientation	Employee Orientation
Bales	Task Leader	Social Leader
Bowers and Seashore	Goal Emphasis	Support
	System Orientation	Interaction Facilitation
Brown	Production Emphasis	Person Orientation
Stogdill	Production Emphasis	Tolerance of Freedom
	Representation	Consideration
	Role Assumption	Demand Reconciliation
	Persuasion	Predictive Accuracy
	Superior Orientation	Integration

Source: Hoy and Miskel (1978:180)

Studies of Decision-Making

Approaches to the study of decision making have included determination of who makes decisions, how decisions are made, and how to improve the quality of decisions. Herbert Simon (1957:1-18), one of the primary investigators in this area, believes that a more sophisticated approach than asking who makes the decisions is to ask what decisions a person is allowed to make and what influences are exerted on him in reaching each decision. Simon (1957) claims that decision making is hindered by human frailties in judgment, in limited ability to search for alternatives, in the misinterpretation of information, and in the incorrect estimation of probabilities. Thus, Simon believes, decisions are made on the basis of being good enough, i.e., "satisficing," because of "bounded rationality." Simon's principle of bounded rationality states that:

> The capacity of the human mind for formulating and solving complex problems is very small compared with the size of the problems whose solution is required for objectively rational behavior in the real world -- or even for a reasonable approximation to such objective rationality.

Litchfield (1956) emphasizes the importance of decision making to the administrative process by proposing that the administrative cycle of activities begins and ends with decision making. Simon (1977:40) concurs when he concludes that decision making activities "account for most of what executives do."

Regardless of their different approaches to decision making all of the foregoing authors regard decision making as central to administration.

Content of Administrative Work

The earliest empirical study of administrative behaviour appears to be the investigation of nine Swedish company presidents by Carlson (1951). Carlson (1951:10) states that the goal of his research was to identify "certain common behaviour patterns and some general relationships which characterize these patterns." Using a diary form designed by Carlson, the nine subjects of the study recorded their daily activities. Based on his analysis of the executives' diaries, Carlson presents results in three areas -- working time, communication patterns, and work content. In the area of work content Carlson's findings are extremely limited, as he (Carlson, 1951:49) points out:

> The study of the kind of action was, as I expected it to be, the most difficult part of our whole investigation, and neither the concepts nor the recording technique used are as yet sufficiently refined in this respect.

Carlson (1951:108) required only one page to report his findings relative to the content of administrative work. His only major conclusion was that the chief executive's primary activity is keeping himself informed.

Carlson's work generated other studies of a similar nature (Burns, 1954 and 1957; Dubin and Spray, 1964; Horne and Lupton, 1965; Stewart, 1967). All experienced difficulties similar to those encountered by Carlson in his study of work content using the diary method. Stewart (1968:81) summarizes the common problem when she states that administrative activities have not been "defined so unambiguously that different managers recording the same tasks will necessarily classify them in the same way."

Based on these and other previously published reports, and on the results of his own empirical studies Mintzberg (1973) presents findings about both the characteristics of managerial work and the content of managerial work. According to Mintzberg (1973:28-53), the characteristics of managerial work, as derived from previous empirical findings and supported by his own studies, can be summarized as follows:

1) Managers perform much work at an unrelenting pace.
2) Managerial activity is characterized by brevity, variety, and fragmentation.
3) Managers have a preference for live action.
4) Managers prefer the verbal media as opposed to the written.
5) Managers maintain relationships with a variety of contacts -- superiors, outsiders, and subordinates.
6) Managerial activities are a blend of rights and duties.

In describing the content of managerial work, Mintzberg utilizes ten roles which he (Mintzberg, 1973:55) indicates were the result of "a categorizing process, a somewhat arbitrary partitioning of the manager's activities into affinity groups." Mintzberg evolved these roles from inductive analysis of his observational study of five chief executives and grouped them into three areas. Mintzberg (1973:92-93) outlines the roles which constitute the content of managerial work as follows:

Interpersonal Roles

- Figurehead
- Leader
- Liaison

Informational Roles

- Monitor
- Disseminator
- Spokesman

Decisional Roles

- Entrepreneur
- Disturbance Handler
- Resource Allocator
- Negotiator

Each of the Interpersonal roles, according to Mintzberg (1973:56), derive from the manager's position as the "person formally in charge of an organizational unit." This formal authority and the status in the organization which accompanies it, according to Mintzberg (1973:56) create the Interpersonal roles of Figurehead (the duty of the manager to represent the organization in formal matters), Liaison (the manager's interactions "with his peers and other individuals outside the organization"), and Leader (which "defines the manager's relationships with his subordinates"). Arising from the Interpersonal roles is the manager's opportunity to acquire information which, Mintzberg (1973:57) claims, makes the manager "the key nerve center of a special kind of organizational information." Thus, the Informational roles emerge -- Monitor (as the "receiver and collector of information" the manager acquires a "thorough understanding of his organization"), Disseminator (the manager's "transmission. . . of special information into his organization"), and Spokesman ("the dissemination of the organization's information into its environment"). According to Mintzberg (1973:57), the manager's position of status and authority and his access to information make him the centre of the organization's decision making process and thus a manager performs the roles of Entrepreneur (initiator of change), Disturbance Handler (crisis intervention within the organization), Resource Allocator (determining the utilization and distribution of the organization's human and material resources), and Negotiator (arbitrator among subunits of his own organization or on behalf of his organization in negotiations with others).

Studies of Administrative Behaviour in Universities

The teaching of courses of study in higher education, according to Burnett (1973:7), was initiated by G. Stanley Hall at Clark University in 1893, but Peterson (1973:22) reports that the earnest development of higher education administration, as a specialized field of study, had its inception in the post-World War II era of the early 1950's. Peterson (1974) in reviewing over 500 reports on higher education, concludes that the role activities, attitudes and values of crucial officers in universities and colleges have not been well researched. He further indicates that studies of such areas as leadership, decision making, and functional impact have been infrequently attempted. Peterson proceeds to indicate that the dean's role, especially, has been described primarily through the use of survey methods, and that little is known about the dynamics of that role or about interrelationships among societal, institutional, and personal variables and their effects on role behaviour. The intervening years seem to have produced little in these areas since the author's survey of the literature revealed a similar paucity of studies of the administration of universities generally and of the deanship specifically. Cyphert and Zimpher (1980:92) support this conclusion when they state:

> In summary, both the university presidency and the university professoriate have been the object of numerous studies. However, university "middle management," the deanship, represents a void in our data base, even though its importance is increasingly recognized.

The discussion which follows focuses on studies of administrative behaviour in universities supplemented where appropriate by studies from the broader field of educational administration.

Prescriptive and Advocacy Studies

The pioneer studies of the deanship seem to be two similar and related studies by Reeves and Russel (1929 and 1932) who first surveyed sectarian, private, and public institutions and who, in the second study, investigated the administration and organization of 35 liberal arts colleges funded by the Methodist Episcopal Church. Reeves and Russel (1932:87) present the following list of decanal functions which is almost identical to the list reported in the first work (Reeves and Russel, 1929:73-74):

1) To direct the educational activities of the college.
2) To act as chief advisor to the president in matters of college policy, particularly in academic affairs.
3) To formulate educational policies and to present them to the president and faculty for consideration.
4) To direct the attention of faculty members to changing educational thought and practice, particularly as they affect higher education.
5) To transmit to the president the budget recommendations for academic activities, after details have been worked out with department heads.
6) To make reports relating to the work of the college.
7) To supervise curriculums, courses, and methods of instruction.
8) To cooperate with heads of departments in the nomination of new members for the teaching staff, and to make suggestions to the president regarding the promotion, demotion, or dismissal of members of the faculty.
9) To assist in the recruiting of students.
10) To classify students and assign them to classes.

11) To study the progress and academic welfare of students.
12) To serve as chief disciplinary officer of the college.
13) To represent the college at meetings of educational institutions.

Milner (1936:96-97) reports findings, based on a study of 100 small colleges, in which the twenty functions most frequently assigned to the academic dean were:

1) To interview students on all academic matters.
2) To advise failing students.
3) To correspond with parents on all matters of student welfare.
4) To give counsel on all academic problems.
5) To grant permission for changes of courses or study.
6) To supervise the college curriculum.
7) To excuse class absences.
8) To grant permission for extra hours.
9) To supervise all discipline.
10) To interview applicants for admission.
11) To give general advice on all college policies.
12) To help estimate the teaching ability of faculty members.
13) To make annual reports on the academic work of the college.
14) To estimate the constructive influence of the faculty members on campus life.
15) To recommend all changes in curriculum.
16) With heads of departments to make all changes in courses.
17) To improve instruction.
18) To determine entrance requirements for transfer students.
19) To give social guidance to freshman.
20) To coordinate and improve the grading system.

In considering the role of the academic dean, McGrath (1947: 43-47) advocates three major functions for deans: consideration of the means and ends of education, selection of faculty members and the preparation of budgets.

Gould (1964) undertook an extensive questionnaire survey of the academic deanship in which 180 deans of the liberal arts at colleges and universities in fifty American states participated. He presents findings from which he (Gould, 1964:27) concludes that the major functions of the academic dean are:

1) Faculty relations and morale.
2) Recruitment of faculty.
3) Curriculum work.
4) Budget work, promotions, evaluation of personnel.
5) Committee work.
6) Routine administrative duties: correspondence, scheduling, catalog, reports, questionnaires.
7) Counseling.
8) Work with other administrators, advising the president, relations with other colleges in the university.
9) Work with department heads.
10) Policy making, planning, goal setting, institutional studies, study of other institutions.
11) Public relations, alumni relations, speaking engagements, professional association meetings, college functions.
12) Admissions problems, registration problems, foreign students.
13) Seeing parents, students.
14) Enforcing regulations, discipline.

In discussing the administrative process in universities, Litchfield (1971:152) states that it is "a cycle of action composed of the following activities: a. Decision-making. . . b. Programming. . . c. Communication. . . d. Control. . . e. Reappraisal."

One of the most recent studies of the deanship is reported by Konrad. Based on a questionnaire survey of 280 Canadian deans from a wide cross-section of faculties, Konrad (1980:22-26) presents this finding:

> a fairly consistent ordering of [decanal] functions across the faculties emerged. . . organizing responsibilities. . . responsibilities related to power and leadership activities. . . staff development, planning, external relations, budgeting, program development, student development, and other professional duties.

Studies of Leader Behaviour

Extensive studies of leader behaviour have been conducted in elementary and secondary educational administration; however, no studies were found of leader behaviour at the higher education level. Peterson (1973:22) and Culbertson (1976:8, 1980:11) concur that an absolute dearth of information exists in this area.

Literature on Decision Making

Cohen and March (1974) identified numerous factors which influence the decision making of university presidents. These factors are the nature of the position; problematic goals of the institution, the unclear technology of higher education; fluid participation by and among the participants in the institution; and the governance factors unique to universities. These same factors might also influence the decision making of other university administrators, i.e., deans. However, no studies were found to document this assumption.

Content of Administrative Work

The content of administrative work of superintendents of education in Alberta has been studied by Duignan (1979) who reports findings which indicate that Mintzberg's (1973) findings about administrative behaviour among business executives also apply to school superintendents. However, the only study of a similar nature in higher education is one reported by Alexander (1979) who studied one dean of social work for a period of three weeks using methodology adapted from Mintzberg. Alexander's findings also concur with Mintzberg's with one exception. Alexander (1979:14) states:

> A dean's position is also unique and different from other managerial positions because of the nature of the academic setting. A dean traditionally holds a dual appointment, as dean and professor, and is expected to engage in scholarly activities that are vastly different from, and sometimes almost inconsistent with, managerial functions. . . . It is suggested that the role of Professor might be added to the framework suggested by Mintzberg, precisely to delineate those functions which are carried out by the top executive but which are unique to the higher education setting.

Studies of Administrative Behaviour in Nursing Education

A review of the literature which addresses nursing education revealed that very little has been written about the administrative behaviour of nursing deans. Most of the articles are highly subjective in nature and reflective of the individual author's experiences either as or with a nursing education administrator. The content of this section focuses primarily on empirical studies; however, selected reflective literature has also been included if it considered broader conceptualizations based on the author's personal, albeit subjective, observations or reflections.

Prescriptive and Advocacy Literature

Gallagher (1965) produced one of the earliest reference works on nursing education administrative behaviour. In it, she identifies the responsibilities of nursing education administrators in the task areas of curriculum, student personnel services, faculty, finance, interrelations, research, and programme evaluation. These responsibilities are related to the functions which Gallagher prescribes for nursing education administrators, i.e., the functions of planning, coordinating, evaluating, faculty and student development, reporting, budgeting, policy formation, communicating, collaboration, directing, and facilitating.

Topalis (1968) conducted a study of 85 administrators of baccalaureate nursing programmes in the United States utilizing a survey questionnaire to determine the administrators' perceptions of their own responsibilities. She (Topalis, 1968:32-92) reports findings which identify six major administrative functions as perceived by the administrators in her study. These functional areas are the curriculum; faculty and students; planning; communication; professional expression; and individualized functions. Within the functional area of administration of the curriculum, Topalis (1968:32-45) identifies perceived task responsi bilities of administrators as periodic revision of the philosophy and purpose of the programme; development of instructional policies; contractual arrangements for student practica; and the supervision and evaluation of faculty and the curriculum. The task responsibilities which Topalis (1968:61-69) identifies in the functional area of planning involve resource allocation, budgeting, and long-range programme and budget planning. The functional area of communication, according to Topalis (1969:69-80), includes the tasks of two-way vertical and horizontal communication. These communication channels are established by the administrator's participation in meetings of senior administrators of the university, institution-wide committees, and committee and faculty meetings in her own unit. The cluster of task responsibilities which Topalis (1968:81-85) considers in the professional expression function includes interpreting professional nursing education to the community; preparing records and reports; and professional writing for publication. The individualized functions of the administrators according to Topalis (1968:85-92) include those functions which are perceived to be the administrator's responsibility by a minority of the sample. These functions are teaching, counselling, research, and community service.

In considering the responsibilities of the administrator of nursing education programmes, Hart (1977:708) identifies three dimensions of the responsibilities of deans: humanism, professionalism, and legalism. Hart (1968:708) maintains that a "sensitive, respectful, and human" approach, i.e., humanism; "responsibility to the profession for ensuring the quality of . . . programmes, for translating professional standards into a visible reality, and . . . for improving the quality and quantity of professional nursing care available to consumers," i.e., professionalism; and "schools' compliance with all federal, state and local legislation," i.e., legalism, are the primary functions of the administrator of nursing education.

Moreover, Armiger (1976:164-168), based on the work of a national advisory committee of the American Association of Colleges of Nursing, advocates the following responsibilities for deans of nursing: leadership in health care delivery as well as education, cooperation and interdisciplinary sharing in terms of curriculum planning, influence on the quality of life in the community through open relations with the community being served by the nursing education programme, identification of future trends through the wide reading of the research literature, and budgeting.

In addition, according to Palmer (1975:6-9), the behaviour of a dean of nursing should include speaking out on social issues, developing a creative climate in the school, making important decisions regarding faculty selection, finances, and educational programmes.

Studies of Leader Behaviour

The few studies of leadership in nursing education which were found all focus on curriculum leadership, and no studies were found which address a broader conceptualization of administrative leadership. Repp (1970) reports an exploratory study of five executive officers and 126 full-time faculty members from seven baccalaureate nursing education programmes in New York and New England. Based on results of a study which used the critical incident technique involving both faculty members and administrators, Repp proposes a classification of six categories for describing the instructional leadership role of the administrator. According to Repp (1970:80):

> The categories are functional activities which comprise the steps or operations of the processes of curriculum development and instructional improvement. These categories of providing guidance and assistance to faculty are:
>
> 1. Assessing current practices.
> 2. Making decisions as to areas needing work.
> 3. Planning improvement.
> 4. Executing plans.
> 5. Evaluating activities.
> 6. Articulating activities with overall programme objectives.

Within each of the categories, Repp (1970:81) claims that there are six behaviours for deans, as follows:

1. Confers with faculty about curriculum and instruction.
2. Introduces ideas about and approaches to curriculum and instruction.
3. Responds to faculty ideas about and approaches to curriculum and instruction.
4. Provides information, resources, and opportunity for activities related to curriculum and instruction.
5. Explores issues related to curriculum and instruction.
6. Participates in activities related to curriculum and instruction.

Higgs (1978:57-63) reports a study which surveyed 52 deans and 451 faculty members from a proportional, stratified, random sample of baccalaureate nursing programmes in the United States. This study compares the perceptions and expectations of administrators with those of their respective faculty members with regard to the curricular leadership of the administrators. Higgs reports that, while there was congruence regarding the deans' participation in curriculum design and evaluation, there was no agreement either within or between groups as to the level of participation, nor was there agreement regarding the dean's role in curriculum implementation. Generally, the deans perceived themselves to have greater involvement in curriculum leadership than did faculty. The size and complexity of the nursing education programme were inversely related to the perception of faculty that the deans provide curriculum leadership.

The remaining literature sources which were identified in this area (Schaefer, 1978; Diers, 1979; Kjervik, 1979) were reflective papers which discussed the authors' philosophy of and opinions about leadership rather than reporting empirical studies.

Literature on Decision Making

Geiss (1969) conducted a study of the perceptions of faculty and administrators regarding the decision-making authority in collegiate nursing programmes. Based on a sample of 781 faculty members and 43 administrators in 43 baccalaureate nursing education programmes, Geiss (1969:105) reports:

> The extent of agreement of perception between faculty members and administrators in regard to the decision-making authority varies depending upon size and complexity of school and type of decision under consideration.

Schlotfeldt (1956:31-33) identifies sources of authority for decision making in schools of nursing as deriving from higher organizational levels or from outside experts; from the nurse administrator's position; from the faculty group; and from the individual specialists or group of specialists in the faculty.

Again in this area the remaining literature was subjective and comprised of individuals' reflections upon their own experiences. An illustrative example is found in Christman's (1978:12) reflections on his own personal observations in this area while he was dean of nursing:

> There is no easy formula to being a meaningful participant in the decision-making process. The combination of developing a program of strength, harmonious relationships with faculty members, strong ties with the power nexuses in the rest of the campus, articulating with internal sources of power, and an ability to contribute substantially to the growth of the academic institution are the variables that demarcate the successful dean from those who are average performers.

Content of Administrative Work

No studies were found in the nursing literature which addressed the administrative work content of the administrator of nursing education programmes.

Summary

The literature reveals studies which provide knowledge and information about all sections of the topic area labelled Administrative Behaviour. However, in spite of the contributions made by the pioneers of management and administration, the principles, processes, or functions which they prescribed and advocated remain global, abstract, vague and ambiguous generalities subject to individual interpretation. They are useful as a general description but are too imprecise to answer the questions posed at the beginning of this chapter, i.e., to what activities does the dean of nursing (an administrator) devote her working day and what is the purpose of those activities? Similarly, the studies of leader behaviour have also produced only broad general descriptions which while useful to a certain extent continue to be somewhat vague, abstract, and ambiguous. The studies of decision making began to provide some insights into one of the activities of administrators. However, they fail to provide a comprehensive or holistic description of administrative behaviour. The studies of the content of managerial work provided the first precise, comprehensive, and holistic description of administrative behaviour which might transfer or apply to the dean of nursing and might begin to provide some concrete indication of answers to the questions initially posed in this chapter.

A paucity of information exists in the area of administrative behaviour in universities. The studies that were found, and the principles, processes, or functions which were prescribed or advocated, focused exclusively on the "academic" dean, i.e., the dean of the Liberal Arts College or Faculty. Only one study was found which included the deans of all faculties in its population. The author was unable to find any studies of leader behaviour which were conducted in higher education. Only one study of decision making and one of the content of administrative work were found. These studies seemed to support the previous statement that Mintzberg's conceptualization of administrative behaviour might apply to the dean of nursing, since they indicated that it does apply to educational administrators. However, neither of the studies answered the questions posed at the beginning of the chapter; they merely indicated a fruitful area for further investigation.

The prescriptive and advocacy literature in the area which addressed administrative behaviours in nursing education was, again, vague and abstract. The few leader behaviour studies which were found in this area all focused on curriculum leadership and no studies were identified which addressed the total concept of leadership in university nursing education settings. The decision making study which was found dealt with decision making authority rather than the activity itself. No studies on the content of administrative work were found in this area.

In conclusion, there appears to be a dearth of information about administrative behaviour in universities generally and about administrative behaviour in university nursing education specifically. Few of the studies cited provide insight into the actual daily tasks and activities of the dean of nursing, or the purpose of those activities. In other words, none of the studies specifically addressed the questions posed for this study.

Chapter 3

METHODOLOGY

The content of this chapter is divided into three sections: the research design; the review of literature related to the methodology; and the methodology used to conduct this study.

Research Design

Statement of the Problem

The problem addressed in this study was to obtain a description of the characteristics and purposes of the administrative work behaviours of Canadian deans of nursing. The description is aimed at indicating what deans of nursing actually do in performing their daily tasks and at providing the reasons for those activities identified through the study.

Sub-Problems

In addressing the primary problem, the following statements served as a guide for the investigation:

1) the classification of observed administrative behaviours of Canadian deans of nursing;
2) the comparison of the administrative behaviours of deans of nursing as described in the literature with those administrative behaviours identified by structured observation;
3) the comparison of the administrative behaviours of Canadian

deans of nursing with the administrative behaviours of chief executives as described by Mintzberg (1973);

4) the comparison of the administrative behaviours of Canadian deans of nursing with the administrative behaviours of school superintendents as described by Duignan (1979);

5) the formulation of propositions regarding the administrative behaviour of deans of nursing;

6) the generation of hypotheses regarding administrative behaviour relative to general administration theory.

Design of the Study

This study was undertaken using a structured observation field study methodology as described by Mintzberg (1973) and Duignan (1979). Weick (1968:360) broadly defines the observational method as follows: "the selection, provocation, recording, and encoding of that set of behaviours and settings concerning organisms "in situ" which is consistent with empirical aims." Structured observation focuses the investigator's attention on certain broad, predetermined categories of behaviour while continuing to permit the development of further categorizations during and subsequent to the observation period. Mintzberg (1973:227) indicates that structured observation provides the "inductive power of observation coupled with the structure of systematic recording." Smith (1975:201) differentiates structured observation from unstructured observation on the following basis:

> [it] is relatively precise in specification of what is to be observed, ignored, and recorded, . . . and may entail the use of measuring techniques and instruments which are paradigmatically foreign to common everyday observations.

Smith (1975:201) further states that "form, duration, frequency, antecedents, and consequences of particular behaviors and social structures" constitute features of structured observation.

The field study methodology was chosen to permit the type of research activity which Kerlinger (1973:406) describes as "preliminary methodological and measurement investigation . . . aimed at discovering or uncovering relations." Also according to Kerlinger (1973:405), field studies are conducted in "life situations" as opposed to laboratory or simulated situations. In this present study, all observations were conducted in the subjects' usual work locations.

Classical concepts of experimental research design do not apply in field research, as Strauss et al. (1964:30) indicate:

> Characteristic of fieldwork is its temporally developing character. The fieldworker usually does not enter the field with specific hypotheses and a predetermined research design. To be sure, he does have general problems in mind, as well as a theoretical framework that directs him to certain events in the field.

Similarly, Kerlinger (1973:405) states that in field studies the researcher "ordinarily manipulates no independent variables." Williamson et al. (1977:209) state that in field studies "researchers do not go into the field with a well formulated problem or an explicit set of hypotheses to be tested." Rather than the formalized specific design of experimental research, field studies are characterized as dynamic, interactive processes. This conceptualization is supported by Coombs (1964:4), Strauss et al. (1964:20), Lutz and Iannaccone (1969:134), Kerlinger (1973:415), Smith (1975:232), Williamson et al. (1977:202), and Duignan (1979:49). The field study is dynamic in that its design evolves as the observations proceed; it is interactive in that several phases can occur concurrently. Thus, in this present study, as in that of Duignan (1979:49), "the processes involved in carrying out this study, therefore, constituted the design for the study." The process utilized in conducting this study was the three phase process identified by Williamson et al. (1977:213):

> The first phase would consist of gaining access to the setting and beginning one's observations. The second phase would involve reconstructing past events and seriously collecting data. The last phase of field research would consist of analysis per se.

Literature Related to the Methodology

Strengths and Weaknesses of Field Studies

In discussing field studies, Kerlinger (1973:406-408) presents the following strengths of the method: "realism, significance, strength of variables, theory orientation and heuristic quality." Williamson et al. (1977:209) emphasize that "the essential strength. . . is that it allows the researcher to continuously integrate the processes of data collection and analysis." Lutz and Iannaccone (1969:115) integrate the work of several authors and present the following extensive list of advantages for this type of methodology:

1. Areas not open to other researchers are open to the participant observational roles.
2. Process variables of human interaction which presently defy quantification are less likely to be distorted.
3. Pre-judgment in terms of hypotheses are not necessary or desirable as the process is studied.
4. The role is either occupied by the observer, or he can "build" a suitable role as the research proceeds.
5. The observer is free to move from data to theory and back again. (This is important and advantageous in theory building.)

6. The researcher is freer to "explain" his data. In fact, he is obligated to do so while the experimentalist either supports or fails to support his hypotheses without the necessity of explaining the process.

7. Living within the system allows the researcher to discard meaningless questions and data as soon as his mistake is discovered. The questionnaire survey researcher is not so fortunate.

8. Depending on the researcher's role, the motives of the society are more easily described and explained. In any case, this method has the advantage over other methods for getting at these.

9. Classification of behavior is not forced into a preconceived scale or index of behavior.

10. Categories of behaviour can be modified and remodified in order to better account for the data and thus more clearly describe the process.

11. Data collection is not limited to a preconceived sample of respondents; rather, it can be extended to all relevant information appearing in the society.

12. Process and understanding of process, often called "in depth study," is better done through this methodology.

13. As new hypotheses emerge during the study, data can be sought that support or refute these new insights.

14. Information collected and recorded is wide and varied but constantly appraised to direct further data collection. Thus, what seemed irrelevant at the beginning of the research may prove to be a major finding and result in extensive data collection before the research is concluded.

15. A participant as an observer can manipulate what seems to be important variables in a process to determine the effect this has on the "real life phenomenon." So can, to a lesser extent, the observer as a participant or even the non-participant observer.

Referring specifically to structured observation type of field study, Smith (1975:202) identifies five advantages of this methodology:

> The more structured the measurements, the more clarity that may be given to a particular theory. Second, the fact that the form of observation schemes reconceptualizes a given phenomenon may lead to

> reformulated and serendipitous theory. . . . Third. . . recall of past behavior and events through questionnaires and interviews is often highly unreliable. Thus a preferable alternative may be to directly observe behavior or events. Direct observation is often more reliable than recall. . . . Fourth, structured observation measures are adaptable to many different settings. . . . Fifth, subjects often are in no position to introspect.

Weaknesses of the field study methodology which have been identified, include those listed by Kerlinger (1973:408): its "ex post facto character," the "plethora of variables and variance" in the field situation, the "lack of precision in the measurement of field variables," and the "practical problems: feasibility, cost, sampling, and time." The "major, severe criticism of field research" which Williamson et al. (1977:216-217) put forward is that:

> qualitative research does not easily allow a researcher to produce reliable measurements of phenomena, and consequently is of limited utility in definitively testing qualitative propositions. . . . There is no way to easily assess the reliability and validity of the interpretations made by the researcher.

Williamson et al. (1977:217-218) proceed to identify six "related weaknesses of qualitative field research." These related weaknesses are: the small size of the social setting which can be examined; the lack of "safeguards against the particular biases, attitudes, and assumptions of the researcher;" the potential of the researcher's "selective perception and selective memory possibly biasing the results of the study;" the representativeness of the selected data; the influence of the observer on the situation being observed; and the limited replicability of field studies. Lutz and Iannaccone (1969:116) identify similar weaknesses of the methodology:

> 1. The method is expensive in terms of time and money, particularly in roles other than the participant as an observer.

2. Competent research requires that the field worker be extensively and carefully trained.
3. As a participant observer, the researcher is susceptible to the selective bias of the role and may not be able to accurately report what he sees. This is true to lesser degrees of the other two roles.
4. The bias that enters into reporting data is even more difficult to control in data analysis.
5. Due to his role in the society, the researcher may not be permitted to view some important interactions.
6. Hypotheses usually cannot be tested in the statistical sense by this methodology.

Additional weaknesses of this methodology, which were not discussed by the preceding authors, are identified by Weick (1968:359):

> Observers have spent more time worrying about issues of categorizing and training than about issues of the setting for observation or response measures. As a result studies involving observational methods have often been inconclusive because records are incomplete, response measures are ambiguous, and settings are needlessly complex. . . . Thus it is not surprising that, despite the care that has been applied to categories and training, the conclusions that emerge from observational studies are often equivocal.

Role of the Observer

Gold's (1958) classification of observer roles is commonly used (Lutz and Iannaccone, 1969:106; Smith, 1975:234-235; Williamson et al., 1977:205). Gold (1958:217) proposes a set of four possible roles for field study observers: complete observer, observer-as-participant, participant-as-observer, and complete participant. In this classification system, both the complete observer and the complete participant are totally disguised from the subjects of the study. The complete participant is hidden by his adoption of a role in the setting; the complete observer is hidden in some concealed observational position. The remaining two roles for observers in field studies are between these two extremes. They are both exposed to the subjects but they are differentiated on the basis of the emphasis which the observer places on his involvement in the observational setting. The participant-as-observer focuses on becoming affectively involved in the setting and might withhold some or all of his research objectives from the subjects. The observer-as-participant is totally open about his research objectives, focuses on the observation, and avoids becoming involved in the situation. Of particular relevance to the present study are the following statements by Smith (1975:234-235):

> When contact with subjects is relatively brief, formal, and openly classified as observation, we speak of the observer-as-participant. Here the major sources of bias are likely to be outcomes of misperceptions caused by the brief and formal nature of the field worker's contact. In Schatzman and Strauss's (1973) view the danger is that the field worker will see "motion" rather than "action" because the observer-as-participant role makes it difficult to get at meaning. In part this limitation is due to the fact that the observer-as-participant engages in telling himself what he is seeing as opposed to understanding the action from the point of view of his study subjects. However, this limitation is also a function of the fact that the observer-as-participant role is not as conducive to the establishment of trust relationships as a more participatory role.

Lutz and Iannacconne (1969:108) propose a similar type of classification of observer roles utilizing five components as follows:

1. The participant not acting as scientific observer
2. The participant as an observer (owning group membership)
3. The observer as a limited participant (allowed group membership)
4. The observer as a non-participant (without group membership)
5. The observer (without presence in the group).

Kerlinger (1973:538) identifies two major effects of observers on field study results: one is the effect of observer-inference; the other is the effect of observer interference. Observer inference refers to the necessity, in field studies, for the observer to provide the link between the behaviour which occurs and the construct which is recorded. Kerlinger (1973:538) states:

> The observer must digest the information derived from his observations and then make inferences about constructs. . . . The strength and the weakness of the procedure is [sic] the observer's powers of inference. . . . One of the recurring difficulties of measurement is to bridge the gap between behavior and construct.

Kerlinger (1973:538) proceeds to suggest that faulty observer inference might be due to either "human fallibility" or inadequate "knowledge of that behavior, and even of the meaning of the behavior." He further indicates that the effect of observer inference might be influenced by the amount of inference which is expected of the observer. Kerlinger (1973:543) also states, with particular relevance to the present study, that:

> Molecular systems require relatively little inference. The observer simply notes that an individual does or says something. . . . Pure behavior is recorded as nearly as possible. . . . Since such items are comparatively unambiguous, the reliability of the observation system would be substantial.

However, observer interference, according to Kerlinger (1973:539), refers to the manner in which an "observer can affect the objects of observation simply by being part of the observational situation." Weick (1968:369) concurs that observer interference might affect results in field studies, however, he emphasizes that:

> The real issues are how extensive the impact is, which settings and processes are most valuable to its effects, and whether interference can be detected.

Both Kerlinger (1973:539) and Weick (1968:373-376) conclude that observer interference can be minimized. As Kerlinger (1973:539) states:

> Individuals and groups seem to adapt rather quickly to an observer's presence and to act as they would usually act. This does not mean

> that the observer cannot have an effect. It means that if the observer takes care to be unobtrusive and not to give the people observed the feeling that judgments are being made, then the observer as an influential stimulus is mostly nullified.

Observational Procedures

Williamson et al. (1977:210-213) advocate that the field researcher collect three types of observations: descriptions of the setting being studied, descriptions of people, and descriptions of communications. They (Williamson et al., 1977:211) also suggest that, concurrent with the recording of the descriptions, the researcher should include in the "data collection note-taking process . . . statements of personal feelings, hunches, ideas, or hypotheses." In addition to these first two types of data, i.e., observations and themes, Williamson et al. (1977:212) suggest the inclusion of methodological notes which "consist of a recording of, and commentary on, the success or failure of our data gathering approach(es)." A similar procedure for recording field notes is proposed by Schatzman and Strauss (1973:99-105) who suggest the use of observational (ON), theoretical (TN), and methodological (MN) notes for labelling the recorded data. These labels are parallel to those categories proposed by Williamson et al. (1977:210-213), i.e., descriptions, themes, and methodology.

The actual content of the field notes in structured observation studies is influenced by the structure or conceptual framework which is utilized in guiding the observation. Lutz and Iannaccone (1969:119-120) state:

> The conceptual framework through which the data are collected is essential to the observer. . . . The framework cannot be allowed to

> restrict the data. The framework should, in fact, tend to free the observation from the personal bias of the observer since it dictates the elements of behavior to be observed. It makes it possible for another observer to check the observations of the first since both are looking at the same elements.

Williamson et al. (1975:201) suggest that the "generic facets" of structured observation include the following:

> form, duration, frequency, antecedents, and consequences of particular behaviors and social structures, and relationships between behaviors, attitudes, and social structures.

Mintzberg (1973) and Duignan (1979) structured their observations to include form, duration, frequency, antecedents, and consequences of particular behaviours by specified individuals in specified organizational structures and relationships.

The logistics of actually recording field notes varies with each individual situation. However, most authors (Lutz and Iannaccone, 1969:121-123; McCall and Simmons, 1969:73-75; Williamson et al., 1977:-212) agree that the recording should be consistent with the type of observer role that the investigator has assumed, contain more detail than the investigator anticipates needing, and provide the maximum fullness of recording which is possible in the situation. The generally recommended and preferred format for recording is the field diary or log of events which, according to McCall and Simmons (1969:74), "facilitates the notation of the sequence and context of events, undertakings, data, hunches, and changing field relations." The observational descriptions contained in the field diary or event log are similar to the specimen record which Weick (1968:416-417) discusses. Weick advocates use of the definition of the specimen record proposed by Wright (1960:86), i.e., "a sequential, unselective, plain, narrative description of behavior with some of its conditions." Weick (1968:416-417) suggests that specimen records have these advantages:

> face validity, permanence. . . , theoretically neutral data, extensive detail, isomorphism with behavior, behavior recorded "in situ", breadth due to lay language, and continuity. Furthermore, specimen records can be quantified. . . and they can be collected by unsophisticated observers.

Disadvantages of the specimen record, according to Weick (1968:416), are the difficulty in recording rapid, complex interactions, and the deficits of lay language in terms of its lack of richness and lack of suitability for description. Finally, Lutz and Iannaccone (1969:121) offer practical advice of particular relevance to the present study:

> The observer as a non-participant. . . can take notes while observing without affecting or altering behavior. The observer should be cautioned, however, not to spend so much time taking notes that he fails to observe important data or the meaning of the data in its social context. In order to combat this, the observer should develop a code that serves as a short hand reminder of what he observes. His notes must then be written up immediately after the daily observations are completed.

The Unit of Observed Behaviour

Many authors (Guest, 1960:225; Lutz and Iannaccone, 1969:120; Kerlinger, 1973:542; Duignan, 1979:62) agree that a universally acceptable definition for the unit of behaviour observed in studies of human interaction and social systems has yet to be achieved. Guest (1960:225) and Kerlinger (1973:510) both suggest that the level of description for behaviour is dichotomous. Guest (1960:225) labels his perception of the dichotomy according to the "level of inference" required of the observer:

> The lowest level of inference is to observe simply that "A speaks to B." A high level of inference involves elaborate explanation of the reasons why A speaks to B.

Kerlinger (1973:510) suggests that recording of behaviour can be described as being either molar "which takes larger behavioral wholes as units of observation" or molecular "which takes smaller segments of behavior as units of observation":

> The molar observer will start with a general broadly defined variable . . . and consider and record a variety of behaviors under one rubric. He depends on his experience and interpretation of the meaning of the actions he is observing. The molecular observer. . . seeks to push his own experience and interpretation out of the observational picture. He records what he sees -- and no more.

Lutz and Iannaccone (1969:121) concur and suggest that the definition of the observation unit is the researcher's responsibility:

> The field researcher must make decisions for his operation concerning what will constitute units of behavior and where more complex events will be considered as having begun and ended.

Gold (1960:234) reports individual units of behaviour as "incidents" and defines these as follows:

> an identifiable single event with an integrity of its own: it has an observable beginning and ending in a time continuum. It ends when there is a major change in one of the elements or "dimensions" of the foreman's behavior."

Mintzberg (1973:271) operationalizes "activity" as beginning at "any point at which there was a change in the basic participants and/or the medium (a meeting, a telephone call, desk work, a tour).

Data Analysis

In field research, as indicated in the discussion of research design, classical concepts of experimental design do not apply. While data gathering and data analysis are separated here for purposes of discussion, in practice they are not discrete and separate entities. Rather, data analysis is initiated in the field when the observer infers a concept from what he sees, and records it. Simultaneously, the observer also records impressions regarding themes which seem to recur during his observations. When he leaves the field, the researcher proceeds with further analysis by clustering these observational data and thematic notes into conceptual categories. Williamson et al. (1977:214) suggest that the researcher approach this initial categorization by reading through his field notes and creating a list of as many descriptive categories as it is possible to generate from the data. The researcher must then "arrange and rearrange" the categories until he is satisfied that they are discrete, mutually exclusive, and comprehensive of the collected data. Then, returning to the field notes, the researcher codes each piece of data by the category (or categories) into which it fits. A particular datum might "properly be coded into a number of categories." Having coded the data, Williamson et al. (1977:214) recommend that the researcher sort the data by category. The categories might need to be refined again at this point. The researcher should now have an indication of categories which contain the most data. Williamson et al. (1977:215) suggest that:

> the sheer quantitative volume of data on one or other feature of the situation studied will almost necessarily influence the organization and content of the final report.

These technical, procedural aspects of the process of data analysis are preparatory to the writing of the actual analysis itself. Williamson et al. (1977:215) submit that the process of writing the analysis in a "coherent fashion. . . causes a re-evaluation of old ideas and leads to the formulation of new ideas." They further emphasize that:

> Analysis . . . is not produced in a predictable, serial, linear fashion. There is a reciprocal relationship between ideas, such that one idea suggests others which in turn reflect upon and change the original idea, and so on.

Therefore, the procedures and techniques of categorization are merely tools which the researcher uses in the iterative process of developing an analysis which will contribute new insights to the understanding of the situation being studied. The ultimate goal of the analysis is the generation of testable hypotheses and propositions.

Reliability and Validity

Observational research methodologies have frequently been subjected to criticism by researchers using other methodologies because of questions related to reliability and validity. However, Lutz and Iannaccone (1969:123) emphasize that "all scientific investigation operates under the same constraints," i.e., the constraints of a human observer who perceives through five senses which are "not always as accurate as we would hope." Lutz and Iannaccone (1969:123) add that "the researcher must do all possible to establish reliability and validity, but can never establish his findings as 'Truth'." They (Lutz and Iannaccone, 1969:124) further maintain that:

> Once reliability is established, validity is not so much a question in field observations . . . . The observer is viewing the actual behavior. He is not one-step away from the behavior as is the case when tests are used to measure perceptions of behavior. Rather, the field observer is looking at the actual behavior. In this method, if the data are reliable, they are usually valid.

According to Smith (1975:223), reliability in structured observations is affected by the setting, the behaviours, and the coding system. With regard to reliability in the setting, Campbell (1961:340) argues that:

> The greater the direct accessibility of the stimuli to sense receptors, the greater the intersubjective verifiability of the observation. The weaker or more intangible, indirect, or abstract the stimulus attribute, the more the observations are subject to distortion.

With regard to the reliability of observations of behaviour Weick (1968:406) maintains that "if demands for inference and judgment are reduced . . . then the problems of reliability also tend to be reduced." Concerning the reliability of coding systems, Gellert (1955:194) contends that:

> The fewer the categories, the more precise their definition, and the less inference required in making classifications, the greater will be the reliability of the data.

This position is supported by Weick (1968:423) who states that:

> Category systems vary greatly in the amount of contextual information that the observer needs to assign a behavior to a category. The general rule is that context should be used as sparingly as possible, and the immediate situation should be the sole basis for categorization.

Observer inference and observer interference, as discussed in a previous section on the role of the observer, also represent potential sources of unreliability or invalidity in structured observational field studies. However, molecular or specimen recording methods can reduce the effect of observer inference, while observer interference can be minimized. Additional sources of observer unreliability, according to Smith (1975:225-226), are observer "satiation or boredom" and "observer oversocialization ('going native')."

Ethics

Ethical dilemmas, according to Williamson et al. (1977:206), tend to be more pronounced when the observer adopts a role which lies closer to the "covert, participatory end of the spectrum." Williamson et al. (1977:206) recommend that the researcher be guided by two ethical principles:

> First, researchers must never deliberately misrepresent their identities to enter a private domain where they would otherwise have no legitimate access. Second, investigators must never misrepresent their research intentions.

Lutz and Iannaccone (1969:126) maintain that there is "nothing immoral about observing and recording data related to human behavior." In fact, they argue that "it is immoral not to attempt to discover human relationships and understand social behavior." However, they (Lutz and Iannaccone, 1969:126) advocate that the researcher take certain precautions including protection of the anonymity of the people and places observed, and proscription of libellous reporting and invasive methods such as the use of hidden microphones, recorders, or eavesdropping.

Methodology

Operational Definitions

For the purpose of this study, the following operational definitions applied for terms whose meanings might otherwise have been ambiguous:

Behaviour was defined as the conscious thoughts of the subjects as described to the investigator and/or the overt actions of the subjects as perceived by the investigator.

Dean of Nursing was the term for the senior administrator of the academic unit that is charged with the responsibility for the nursing education programme within the university. The titles Director and Chairman were considered as synonymous.

University nursing education programme referred to the generic course of studies which leads to the conferring of a university degree, either baccalaureate or masters, in nursing.

"Faculty of Nursing" was the term applied to the academic unit that is charged with the responsibility for the nursing education programme within the university. Units known as Departments of Nursing, Schools of Nursing, or Faculty of Health Science were considered equivalent.

Sample

The sample was selected from the anglophone university nursing education programmes in Canada having incumbent deans (Appendix A). The sample was restricted to anglophone programmes because of the cultural variables, and the historical differences in the administrative structures between French-speaking and English-speaking universities in Canada. One university nursing education programme was selected from each of the C.A.U.S.N. regions, i.e., Atlantic, Quebec, Ontario, Western, in an attempt to negate the effects of regional differences. An additional programme was selected from the Ontario region because of the larger number and diversity of the programmes in that region (Appendix A). The selection of the representative programme from each region was made using a table of random numbers. The deans of the selected programmes constituted the sample for the study. The deans of three additional programmes were similarly selected as alternates in the event that one of those chosen initially was unable to participate.

Entry

Each of the deans of the eight programmes selected was sent a letter in which the project was explained and their participation was solicited (Appendix B). Following this initial contact letter, each of the subjects was telephoned for the purpose of providing additional clarification of the project; soliciting their consent to participate; and, if they agreed to participate, to set an appointment for the initial observation period. Of the five deans initially selected as the subjects, four consented to participate in the study. In place of the one initially selected subject, who anticipated being unavailable for the full period of the study, the regional alternate who was approached agreed to participate. The other two alternates were also telephoned to thank them for their consideration of the request and to inform them that the required number of subjects had been achieved. Each of the subjects was then sent a letter (Appendix C) which thanked them for considering the request to participate, confirmed their participation, and verified the dates of the first observational visit. Similarly, each of the alternates was sent a letter (Appendix D) which thanked them for considering the request to participate, informed them that the required number of subjects had been reached, and volunteered to make the results of the study available to them.

Sequencing and Timing of Observations

The investigator planned two observational visits to each subject in order to observe the deans' activities at two different time periods during the academic year. The purpose of two separate periods of observation was to permit consideration of temporal influences on decanal administrative behaviour. Within the limitations of geographical constraints observational visits were scheduled so that all subjects were observed as closely as possible to a median time-point in the observation period. Each observational visit was scheduled for a duration of three working days. All subjects were observed for three working days during the period from April 8, 1980 to April 30, 1980. This period was chosen because all of the subjects' institutions were between academic sessions. Following the completion of this first round of observational visits, a letter (Appendix E) was sent to each subject thanking them for their participation in the first round of data gathering and requesting confirmation of the schedule for the second observational visit. The second period of observational visits was scheduled during the period from October 22, 1980 to November 14, 1980 and all subjects responded in the affirmative to the dates suggested for the second visit. This period was chosen because it occurred during the middle of an academic session when classes were meeting and it was approximately six months after the initial period of observation. Unfortunately, the sudden, unavoidable, and extended unavailability of one of the subjects necessitated last-minute cancellation of the scheduled second observational visit with her and made rescheduling impossible. Therefore only four of the subjects participated in the second observational period. The sequence in which the deans were visited during the second period of observation was changed in order to negate any possible effect of observational sequence on the data. The pattern of the observational visits is illustrated in Figure 2. The total period of observation for four of the subjects was comprised of six days; for one of the subjects the total period of observation was only three days. At the conclusion of the second observation period each subject was sent a letter thanking her for her participation in the project (Appendix F).

	Time	
Dean	1	2
1	Observation 1	Observation 7
2	Observation 2	Observation 9
3	Observation 3	Not Available
4	Observation 4	Observation 8
5	Observation 5	Observation 6

Figure 2

Pattern of Observational Visits

Role of the Observer

The observer role chosen by the investigator was one which permitted total openness about the research objectives, which focused on observations, which avoided involvement in the situations, and which permitted the investigator to be present in the group without belonging to the group. This type of observer role is labelled "observer-as-participant" by Gold (1958:217) and "observer as a non-participant" by Lutz and Iannaccone (1969:108). This type of role most closely approximated the observer role which was utilized by Mintzberg (1973) and Duignan (1979).

Observational Procedures

The first type of data which was collected, was that which Williamson et al. (1977:210) label "description of the setting," and Mintzberg (1973:232) calls "preliminary data." The data which were gathered included copies of organizational charts, published documents describing the organizational structure of the respective institutions, university calendars, lists of faculty members, and copies of the provincial legislation governing the respective universities. These data permitted the investigator to familiarize herself with the subjects' individual work environments and provided an essential organizational context for the observations.

The second type of descriptive data which was gathered was related specifically to the subjects. Each of them provided the researcher with a copy of her curriculum vitae and the researcher also sought out copies of material published by or about the subjects. These documents provided demographic data for the study and enabled the researcher to familiarize herself with the subjects in preparation for the actual observations.

Observations of all of the deans' activities throughout the working day were recorded by the investigator. The recorded observations described the activity as to duration, participants, location, purpose, format, and initiator of the activity. Thus, the essential "generic facets" of structured observation, which Williamson et al. (1975:201) identify, were included in the recorded observations. Concurrent with the recording of descriptions and observations, the researcher also noted recurring patterns or themes in the observations. These thematic notes included hunches, ideas, or suspicions about possible propositions or hypotheses. In actuality, the thematic notes represented the beginning of the analysis.

The format for the recording of the observations was that which is variously known as the field diary, log of events, or specimen record. Regardless of its label the format facilitated the researcher's chronological recording of the "sequence and context of events, undertakings, data, hunches, and changing field relations" as described by McCall and Simmons (1969:74). The observations were anecdotally recorded by hand in the observational setting using personal short-hand and abbreviations. Telephone calls and mail were recorded in both the anecdotal notes and in more detail in the mail and telephone logs which the researcher adapted from Mintzberg (1973) and Duignan (1979) explicitly for that purpose (Appendix G). The daily anecdotal notes and logs were then typed into a legible and readable format.

At the termination of each observational visit, the investigator conducted a structured interview with each dean. Each interview was tape recorded and the responses transcribed and organized around the interview questions. The questions were adapted from Duignan (1979: 249-250) who states that:

> Many of the questions posed by the interviewer were developed with the intention of measuring each subject's perception of how closely his work behavior corresponded to the 10 managerial roles identified by Mintzberg (1973).

The questions asked of all deans at the completion of each of the two observational visits can be found in Appendix H.

The Unit of Observed Behaviour

In recording the observational data, the investigator endeavored to achieve a combination of the low inference (or molecular) level of recording and the high inference (or molar) level of recording. The molecular level of recording was used to address the research problem of generating a detailed description of the daily administrative behaviours of the deans, whereas the molar level of recording was used to permit consideration of the research problem of describing the purposes of administrative work behaviours.

The definition for the "unit of observed behaviour" which was selected for use in this study was taken from Duignan (1979:64) and is a combination of the "incident" as defined by Gold (1960:234) and the "activity" as defined by Mintzberg (1973:271):

> a single event with an identity of its own. It had an observable beginning and ending in a time continuum. It ended when a major change occurred in one of the elements or dimensions of the [dean's] behaviour, e.g., when there was a change in the basic participants and/or medium of communication.

Definition of Terms Used in Coding Data

The following terms were adopted from Duignan (1979:64-65) and were used in the coding of the data:

> Unscheduled meetings. These referred to meetings between the [dean] and others that took place by chance, on the spur-of-the-moment, or with less than 30 minutes notice.
>
> Scheduled meetings. These consisted of meetings between the [dean] and others that were arranged at least 30 minutes prior to their occurrence.
>
> Desk work. This refers to the times that the [dean] worked at [her] desk, processing mail, writing letters and reports, and reflecting on events.
>
> Telephone calls. These included both incoming and outgoing telephone calls. Any calls placed by the [dean] that were not completed, for any reason were included.
>
> Tours and visits. These refer to the time spent by the [dean] in various parts of the faculty for the purpose of (1) observing general aspects of the system's operation, and (2) observing. . . teachers for evaluation.

The following definitions were generated for use in the study for otherwise ambiguous terms:

1) Travel refers to time spent by the dean in moving from one location to another for purposes of conducting or participating in the affairs of the Faculty of Nursing.

2) Evening activities were those work related activities which were conducted during the evening hours. Examples of such activities included attending a meeting of the provincial nursing association, teaching an evening class, entertaining a visiting faculty member from another university, or reading a student's paper. Evening activities could not always be observed directly by the researcher. Therefore, the procedure used by Mintzberg (1973:269) was utilized, i.e., the subjects were asked "to summarize, in a sentence or two, the information that was needed." Evening activities were considered part of the working day and were coded and totaled with activities occurring during office hours.

3) Solitary activities were those activities which the deans performed alone or unaccompanied. This term is analogous to the term "desk work" as used by Mintzberg (1973) and Duignan (1979).

4) Joint activities were those activities which the deans performed in the company of others. These activities were subdivided into intra-institutional participants and extra-institutional participants. Intra-institutional participants in decanal activities were those participants who were

employed by the same university as the dean who was being observed at the time. Intra-institutional participants were further subdivided into superordinates (the subject's administrative supervisors), subordinates (those members of the faculty and support staff to whom the subjects were administratively senior), peers (the subjects' administrative counterparts within the institution), students (learners, either undergraduate or graduate). Extra-institutional participants in decanal activities were all participants who were employed by institutions other than the one by which the subject was employed. These included representatives of other institutions such as hospitals or universities, representatives of professional associations, government representatives, prospective faculty members or students, parents of students, or retired faculty members.

Data Analysis

As noted in preceding sections which reviewed the literature on data analysis and on observational procedures used in conducting this study, data analysis actually began in the observational settings with the recording of thematic notes. After leaving the observational settings the investigator divided the daily anecdotal notes into behavioural units according to the operational definition which was presented in the previous section on the unit of observed behaviour. Each unit of behaviour was assigned a unique identifying code number. The coded observation record was then cross-indexed with the telephone and mail logs. Examples of one day's coded observational record and the cross-indexed telephone and mail logs can be found in Appendix I. Copies were made of all coded observational records and their accompanying telephone and mail logs. One copy was kept intact and the other copy was cut into individual behavioural units. The pieces of paper on which individual behavioural units were written were first sorted according to the type of media used in the activity. The definitions used for the categories in this classification can be found in a previous section on the definition of terms used in coding the data. The total time and the total number of activity units were then recorded on a daily summary sheet (Appendix J). Similarly, the same pieces of paper on which individual behavioural units were written, were sorted again according to the participants in the activity and daily totals of both time and activity units were recorded on the daily summary sheet for each category in the classification by participants (Appendix J). In order to permit comparison and aggregation of the summarized data, all raw totals were converted to percentages of the entire day's time and activity (Appendix J). The final sorting which occurred was according to the purpose of the activity. The individual, uniquely coded behavioural units were arranged into groups of activities having similar purposes. Finally, thirteen categories arose in four clusters from the data and were defined. The clustered categories of administrative behaviour which evolved from the data were listed as follows:

1) Interpersonal Behaviours
    i) Figurehead Behaviours
    ii) Leader Behaviours
    iii) Liaison Behaviours

2) Informational Behaviours
   i) Monitor Behaviours
   ii) Disseminator Behaviours
   iii) Spokesman Behaviours
3) Decisional Behaviours
   i) Entrepreneur Behaviours
   ii) Disturbance Handler Behaviours
   iii) Resource Allocator Behaviours
   iv) Negotiator Behaviours
4) Scholarship Behaviours
   i) Teacher Behaviours
   ii) Researcher Behaviours
   iii) Author Behaviours

The first three clusters comprising ten categories were so similar to those of Mintzberg (1973:58-94) that his definitions were adapted for use in further analysis of the data. The last cluster of three categories was unique to these data and required initial definition. In coding the units of behaviour by the purpose for which the activity was performed, the thirteen categories were defined in four clusters as follows:

1) Interpersonal behaviours deal primarily with relationships and are subdivided into figurehead, leader, and liaison behaviour. Figurehead behaviours occur when the dean functions as the symbolic head of the Faculty of Nursing and is obliged to perform a number of routine duties of a legal, social or ceremonial nature, such as distributing degrees at

convocation or sending letters on behalf of an alumni fund raising drive. Leader behaviours involve the motivation and activation of subordinates towards the achievement of the goals of the Faculty of Nursing, the responsibility for recruiting and staffing, facilitation of subordinates' career development, role modeling, staff development, and associated activities. Liaison behaviours are those which include maintenance of a self-developed network (local, provincial, and national) or contacts and information sources who provide favours and information.

2) Informational behaviours are those activities which deal with information processing and contain the subdivisions of monitor, disseminator, and spokesman behaviours. Monitor behaviours refer to seeking and receiving a wide variety of special information (much of it current) to develop a thorough understanding of the organization and its environment, thus permitting the dean to emerge as the nerve centre for the Faculty of Nursing. Disseminator behaviours are those activities in which the dean transmits information received from outsiders or from other subordinates to appropriate members of the Faculty. In the performance of spokesman behaviours, the dean transmits information concerning the Faculty's plans, policies, actions, results, etc. to individuals and groups outside the Faculty of Nursing.

3) Decisional behaviours are those activities which involve the

making of significant decisions and may be subdivided into the categories of entrepreneur, disturbance handler, resource allocator and negotiator. Behaviours in the entrepreneur category are those in which the dean searches the Faculty of Nursing and its environment for opportunities and initiates improvement projects to bring about change. Disturbance handler behaviours are those in which the dean initiates corrective action when the Faculty of Nursing faces important, unexpected disturbances. Resource allocator behaviours occur when the dean allocates organizational resources of all kinds, in effect, making or approving all significant decisions within the Faculty of Nursing. The category of behaviours labelled negotiator includes behaviours in which the dean represents the Faculty of Nursing at major negotiations.

4) Scholarship behaviours are those learned academic activities and are subdivided into teacher, researcher, and author activities. Teacher behaviours are those collected activities which contribute to learning, including communication of information and concepts to students, counseling, evaluation, mentoring, etc. Researcher behaviours are those in which the dean participates at the leading edge of the development of new knowledge either as a subject, catalyst, facilitator, principal or co-investigator, resource person, or consultant. Author behaviours are those activities which result in written, published communication about matters of

concern to the profession; they may be of a research, philosophical, or advocacy nature and published in a journal, proceedings of a conference, or as an address to a professional gathering.

Following the generation and definition of the categories for classifying the data by purpose of the behaviour, the data were coded, totaled, recorded, and converted to percentages in the same fashion as for the other two categories (Appendix J).

The small sample size and the qualitative characteristics of the data prohibited the use of statistical treatment of the data for purposes of generalizing to the total population from which the sample was drawn. However the use of composite totals, the interview transcripts, and molar data did permit the administrative behaviour of a typical Canadian Dean of Nursing to be described.

Reliability and Validity

In considering the reliability and validity of the study the researcher was aware of the work of Williamson et al. (1977:213) which stated that:

> It is perfectly plausible that two researchers independently entering the same social situation might emerge with two quite different analyses of data collected. We would add to this idea that each of these analyses might be equally cogent. . . . Qualitative research seeks to discover generic "forms" of social life and. . . any one context may potentially display a number of these forms.

The researcher also recognized Lutz and Iannaccone's (1969:124) argument that, in observational field research, reliable data ordinarily are valid data. However, the researcher incorporated measures into the conduct of the study to enhance its reliability and validity to the greatest possible extent. During the periods of field observation, the investigator utilized the non-participant, structured observation methods adapted from Mintzberg (1973) and Duignan (1979). The use of these established recording and coding protocols and procedures provided the first measure of reliability. Additionally, structured interviews were conducted with each of the subjects. The first interview was designed to solicit the subjects' perceptions of the ten managerial roles which Mintzberg (1973:58-94) proposes. The structured interview which was used was adapted from Duignan (1979:249-250). The second interview, which was conducted at the completion of the second and final visit with each subject, was essentially unstructured and was designed to attempt to validate the researcher's perceptions of the data categories which had emerged from the data gathered during the first round of observational visits. Further measures to enhance the intrarater reliability of the study were pilot observations using videotapes and observation of one dean to test and refine the skills which the researcher required during the conduct of the study. These pilot observations were not included in the results of the study. The final reliability measure was the use of carefully defined operational definitions for all terminology used in the recording and coding processes. While interrater reliability was not a concern since the investigator performed the observations unassisted, every effort was made by the investigator to provide intrarater reliability by eliminating personal bias and by maximizing objectivity. The use of predominantly molecular (low level) recording supplemented by molar (high level) recording served to facilitate the researcher's achieving her goal of minimal subjectivity. The researcher was also able to utilize frequent opportunities to validate perceptions and impressions with the subjects. Additionally, the investigator undertook to utilize the following techniques to minimize the observer-interference effect on validity:

1) provision of a detailed description of the project in advance of the subjects' consenting to participate (Appendix B);
2) protection of the anonymity of each subject;
3) briefing of each subject at the beginning of each observational period in order to maintain continued understanding of the project.
4) maintenance of an unobtrusive, non-judgmental presence; and
5) use of a candid, cooperative, and amicable approach with each subject.

The final validity measure that was incorporated in the study was expressed by Duignan (1979:86): "the use of many items of evidence, together with a wide range of evidence, allowed for interpretations to be made with a greater degree of confidence."

Ethics

The observer role which the investigator chose to adopt in conducting this study was one which permitted total openness about the research objectives, focused on observations rather than participation, avoided involvement in the observational situations, and permitted the investigator to be present without belonging to the group. Therefore, the ethical dilemmas of a covert, participatory observer role were avoided. All subjects gave fully informed consent to their participation in the study. Every precaution was taken to protect the anonymity of the subjects and the institutions by which they are employed. At no time were hidden recording devices of any kind used in the study.

Of obvious concern was the matter of the investigator's access to the mail of the subjects without the prior consent of the sender of a specific piece of mail. Before the beginning of the observations, the investigator negotiated with each subject. The specific content and details of mail contacts were not relevant to the study. Only the primary purpose of the contact, the title or position of the sender, and the action precipitated by the contact needed to be recorded. Therefore, at the discretion of the individual deans, the mail was either directly viewed for recording purposes by the investigator or verbally reported, as to sender (by title), purpose, and action taken, by the dean to the investigator. Also included in the initial negotiations with the subjects was the less obvious concern regarding confidential or sensitive discussions with faculty or students. If at any time either the subject of the study or a discussant believed that the presence of the investigator would violate confidence or hinder the open and positive nature of the discussion, the investigator willingly withdrew from the situation for the duration of the meeting. All discussants, like the subject deans, were informed that observations were made in strictest confidence by the investigator and that their anonymity would be carefully guarded by the investigator in all reports of the study.

Chapter 4

DATA ANALYSIS: PART I

The purpose in this chapter is to present the results of the analysis of the low inference level data (see Chapter 3) generated by the structured observation of five Deans of Nursing at Canadian universities. The chapter is divided into two sections: the deans' characteristic activities and the participants in those activities. The first section begins with an overview of the findings related to the deans' characteristic activities followed by consideration of the manner in which the individual deans distributed their time among the various categories of activities. Next comes a comparison of the amount of time which the individual deans devoted to each of the categories. The first section concludes with the presentation of composite and aggregate summaries of the use of time by the five deans collectively. The second section begins with an overview of data related to the classification of the deans' activities according to the type of participants. This is followed by the presentation of the individual dean's distribution of time among the various categories of participants. Thereafter, a comparison of the amount of the deans' time attributed to each of the various categories of participants is reported. The section concludes with presentation of composite and aggregate summaries of the proportions of time that the deans of nursing spent on each of the categories within the classification of participants.

The Deans' Use of Time

Overview

The ways in which the deans used their time during the Spring observation period are summarized in Table 2. Each dean was observed throughout her entire working day for three days. The total number of minutes worked was used as the basis for other calculations which occur later in this chapter and in the following chapter. Interactions with secretaries, personal telephone calls, organizing the desk in preparation for work, and other like activities were included in the daily total of time worked; however, these activities were designated as unclassified activities and do not appear in the summary tables. Therefore, the daily total time worked may be slightly higher than the sums of the figures shown for the activities. Similarly, Table 3 provides a summary of the deans' use of time during the Fall observation period and Table 4 presents data which results when the data on the two previous tables are combined.

As shown on Table 2, the deans averaged between 7.1 hours per day and 10.9 hours per day. Of the six categories in the classification of types of activities, most of the Deans' time was devoted to unscheduled meetings, scheduled meetings, and desk work. A relatively minor portion of time was used in making telephone calls and travelling to the various locations at which activities occurred. Of particular note is the fact that no tours were taken by any of the deans. The total number of activities in which the deans engaged during their working day ranged from 75 (Dean 3) to 140 (Dean 1), while the

Table 2

Summary of the Deans' Time by Number and Type of Activities for the Spring Observation Period

Activity	Mean	Dean 1	2	3	4	5
Total time* worked during observation	1620+	1630+	1957+	1512+	1709+	1292+
Average time worked per day	540	543	652	504	570	431
Time in Unscheduled Meetings	170	307	255	178	86	26
Time in Scheduled Meetings	757	876	1088	262	1066	495
Time at Desk Work	344	275	309	586	234	317
Time on Telephone Calls	59	108	36	30	43	77
Time on Travel	21	5	57	13	8	24
Time on Tours	0	0	0	0	0	0
Total Number of Activities	125	140	118	75	91	130
Average Number of Activities per day	37	47	39	25	30	43
Average Duration of each activity	16	12	17	20	19	10

* All times are in minutes and are rounded to the nearest minute.

+ Totals are greater than sums of activities because of the deletion of certain unclassified activities, such as interactions with secretaries, or activities of a personal nature.

average number of activities per day ranged from 25 to 47. The average duration of activities ranged from 10 minutes (Dean 5) to 20 minutes (Dean 3).

During the Fall observation period, as shown in Table 3, all of the deans worked a greater total number of hours over the three day period of observation and a higher average number of hours per day. Most of the deans' time continued to be occupied by the activities of unscheduled meetings, scheduled meetings, and desk work. The time spent in meetings, both scheduled and unscheduled, was slightly higher in the Fall than in the Spring. There was a somewhat greater amount of time spent on desk work during the Fall observation. Telephone calls and travel again claimed only a relatively modest amount of the deans' time during the Fall; however, a small increase in the amount of travel time was shown. Again, none of the deans engaged in the activity labelled as Tours. Both the total number of activities by which the deans' time was occupied and the average number of activities per day increased very slightly in two cases and decreased considerably in two cases during the Fall observation period. The average duration of activities increased in all cases during the Fall observation.

The data presented in Table 4 combined the data from Tables 2 and 3 to provide a composite summary of the two observation periods. Four of the deans were observed for six days each and one of the deans was observed for three days. Thus the total observation time was 27 days or 15,405 minutes (256.75 hours). The composite average time worked per day, as shown in Table 4, ranged from 442 minutes for Dean 5

Table 3

Summary of the Deans' Time by Number and Type of Activities
for the Fall Observation Period

Activity		Dean				
	Mean	1	2	3	4	5
Total time* worked during observation	1826+	1893	1781+	Not available for observation in the Fall.	2271	1360+
Average time worked per day	609	631	594		757	453
Time in Unscheduled Meetings	169	276	153		41	207
Time in Scheduled Meetings	775	824	1004		819	453
Time at Desk Work	590	564	368		881	547
Time on Telephone Calls	46	84	34		35	31
Time on Travel	83	27	37		245	24
Time on Tours	0	0	0		0	0
Total Number of Activities	111	144	85		93	121
Average Number of Activities per day	37	48	28		31	40
Average Duration of each activity	17	13	21		24	11

* All times are in minutes and are rounded to the nearest minute.

+ Totals are greater than sums of activities because of the deletion of certain unclassified activities, such as interactions with secretaries, or activities of a personal nature.

Table 4

Summary of the Deans' Time by Number and Type of Activities for the Combined Spring and Fall Observation Period

Activity	Dean					
	Mean	1	2	3**	4	5
Total time* worked during observation	3446+	3523+	3738+	1512+	3980+	2652+
Average time worked per day	574	587	623	504	663	442
Time in Unscheduled Meetings	339	583	408	178	127	462
Time in Scheduled Meetings	1532	1700	2092	262	1885	948
Time at Desk Work	934	839	677	586	1115	864
Time on Telephone Calls	105	192	70	30	78	107
Time on Travel	94	33	94	13	253	48
Time on Tours	0	0	0	0	0	0
Total Number of Activities	236	284	203	75	184	251
Average Number of Activities per day	37	47	34	25	31	42
Average Duration of each activity	16.5	12	18	20	22	11

* All times are in minutes and are rounded to the nearest minute.

+ Totals are greater than sums of activities because of the deletion of certain unclassified activities, such as interactions with secretaries, or activities of a personal nature.

** Only Spring observation period data are available.

to 663 minutes for Dean 4. In all cases the largest amount of time was consumed by attendance at scheduled meetings, followed by desk work and then unscheduled meetings. These three activities occupied the major portion of the deans' time during observation. Time spent on telephone calls and travel represented a relatively minor proportion of the deans' time during observation. The average number of activities per day ranged from 25 (Dean 3) to 47 (Dean 1), while the average duration of each activity varied from 11 (Dean 5) to 20 (Dean 3).

Individual Deans' Distribution of Time Among the Categories of Activities

Dean 1. Figure 3 graphically represents the manner in which Dean 1 distributed her time among the six categories during the two observation periods. During both the Spring and the Fall the largest amount of time was devoted to scheduled meetings. In the Spring these meetings required 55.7% of the Dean's working time and in the Fall they required a somewhat reduced but still substantial 46.5% of her time. The least amount of time during both observation periods was used by travel (0.3% in the Spring; 1.5% in the Fall). Unscheduled meetings consumed 19.5% of the Dean's working time in the Spring and, a little less, 15.5% in the Fall. Telephone calls demanded slightly less time in the Fall, 4.7%, as opposed to the Spring, 6.8%. The only activity which increased in the proportion of time that it required in the Fall was desk work. Fall desk work required 31.7% of the Dean's time, whereas Spring desk work required only 17.5% of her time.

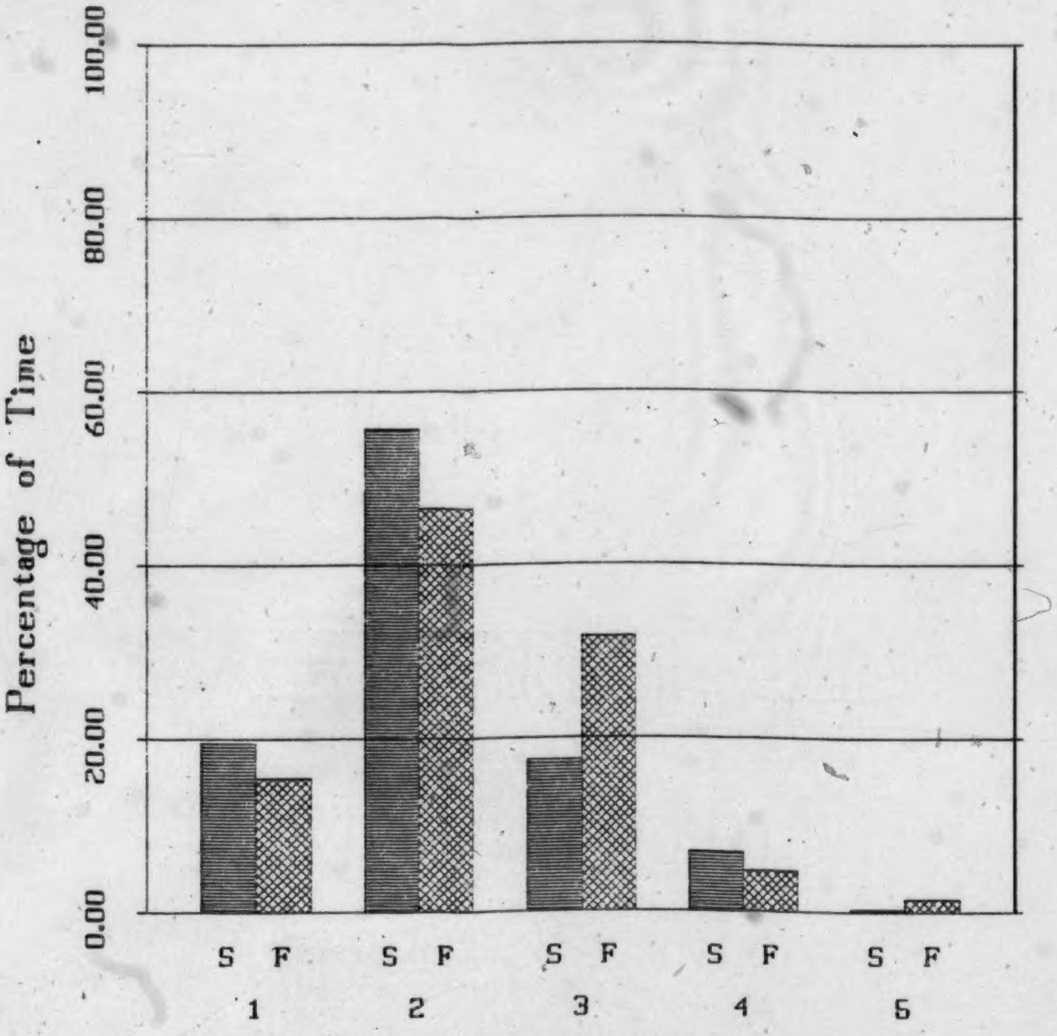

Figure 3 Dean 1 Media by Time

Graph Legend

▤ Spring ▩ Fall

1. Unscheduled Meetings
2. Scheduled Meetings
3. Desk Work
4. Telephone
5. Travel

Dean 2. The distribution of Dean 2's time among the six categories during the two observation periods is shown in Figure 4. The greatest amount of time in both observation periods was required by scheduled meetings. Scheduled meetings in the Spring used 62.3% of Dean 2's time and in the Fall 62.9% of her time was used in this manner. Telephone and travel utilized similar amounts of time with Spring telephoning using 2.0%, Fall telephoning using 2.1%, Spring travel using 3.2%, and Fall travel using 2.3%. Unscheduled meetings in the Spring demanded 14.6% of the Dean's time and in the Fall required 9.5%. The amount of Fall desk work was greater than the amount of Spring desk work, 23.0% versus 17.7% respectively.

Dean 3. Only Spring data are available for Dean 3 due to her sudden, unavoidable, and extended unavailability during the Fall. This unexpected situation made rescheduling of the visit impossible for a variety of methodological and logistical reasons. Figure 5 illustrates Dean 3's use of time during the Spring observations. Desk work (54.8%) required the greatest amount of time, followed by scheduled meetings which utilized 24.5% of Dean 3's time. Time spent on unscheduled meetings was 16.6%. Travel and telephone required 1.2% and 2.8% respectively of the Dean's time.

Dean 4. Figure 6 diagrams the distribution of Dean 4's time among the six activity categories during the Spring and Fall observation periods. In the Spring period the greatest portion of time was required by scheduled meetings (74.1%) followed by desk work which required 16.2% of the Dean's time. In the Fall, the activity which required the greatest portion of Dean 4's time was desk work (43.6%) while scheduled

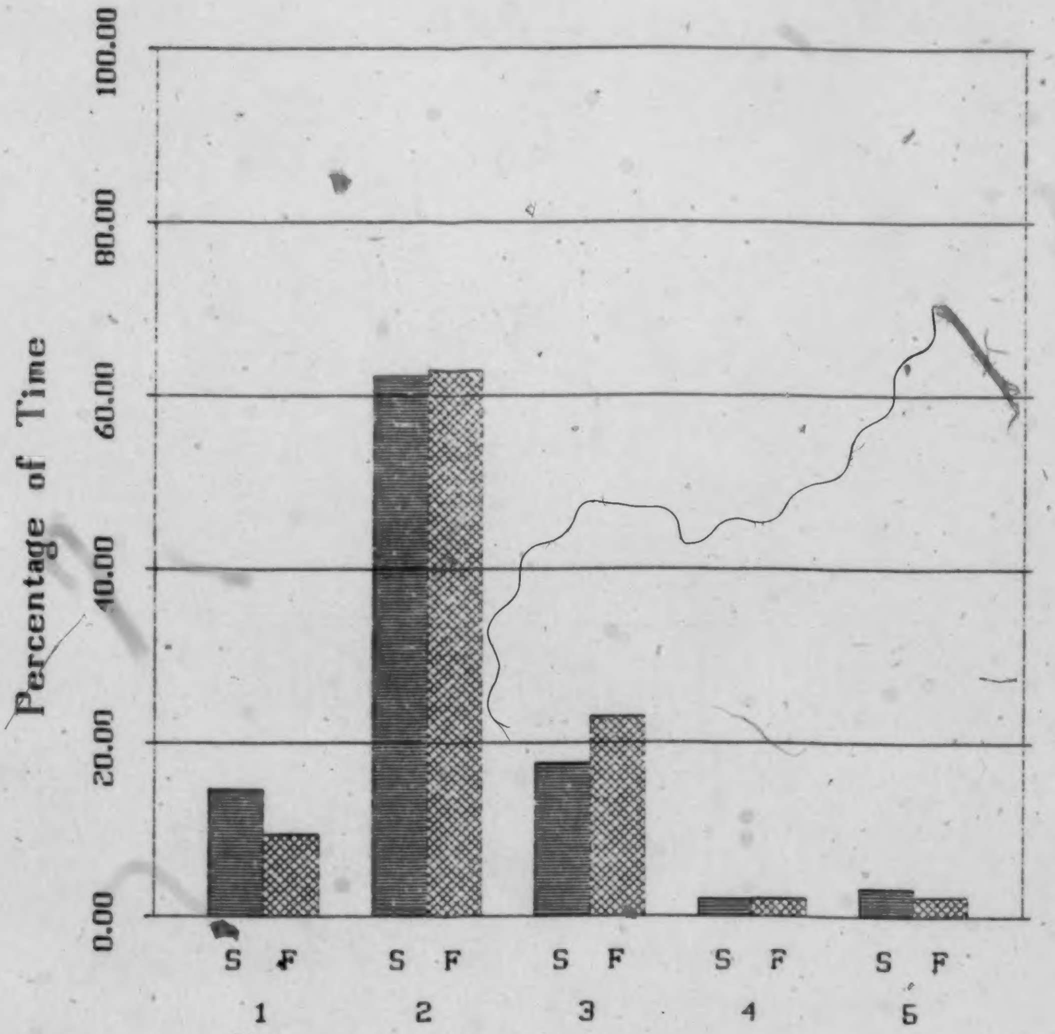

Figure 4 Dean 2 Media by Time

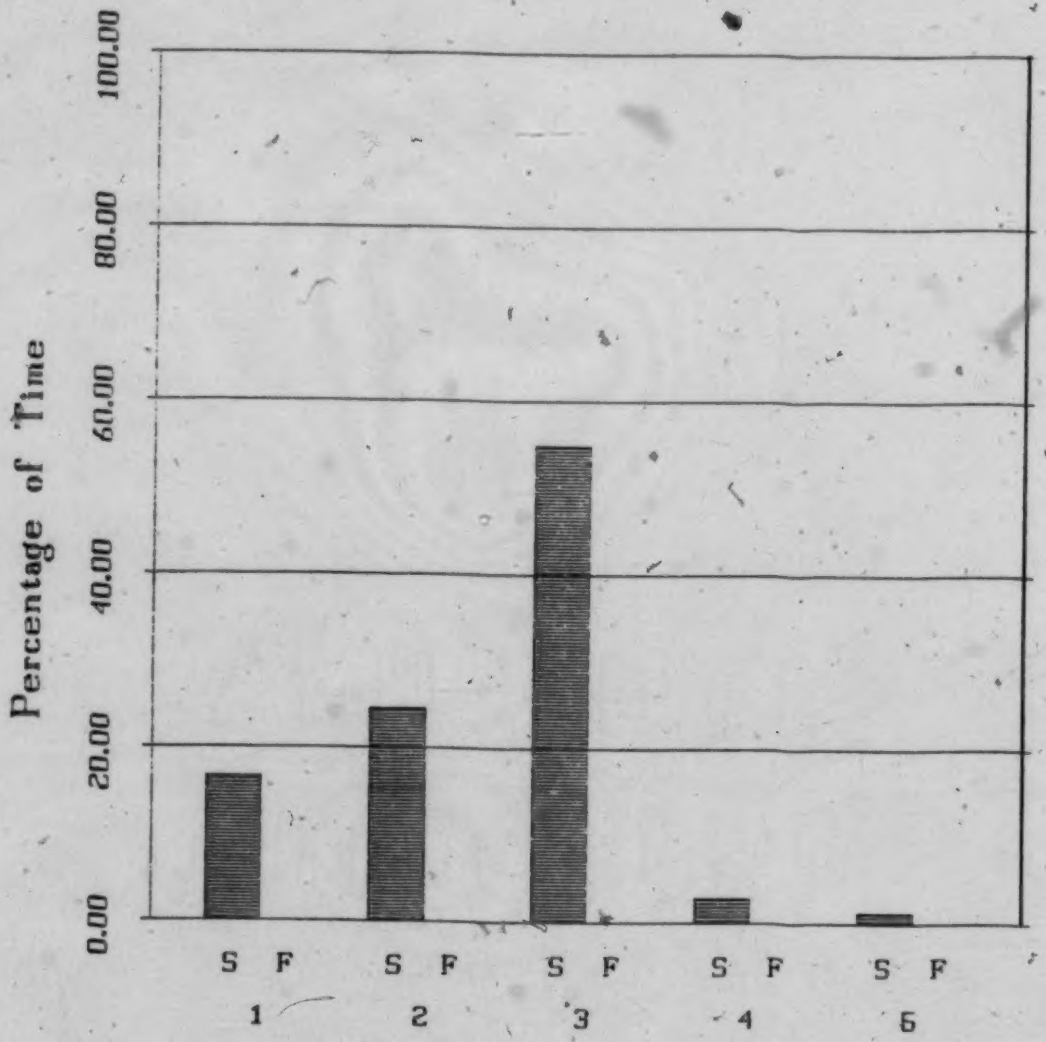

Figure 5 Dean 3 Media by Time

Graph Legend

▤ Spring

1. Unscheduled Meetings
2. Scheduled Meetings
3. Desk Work
4. Telephone
5. Travel

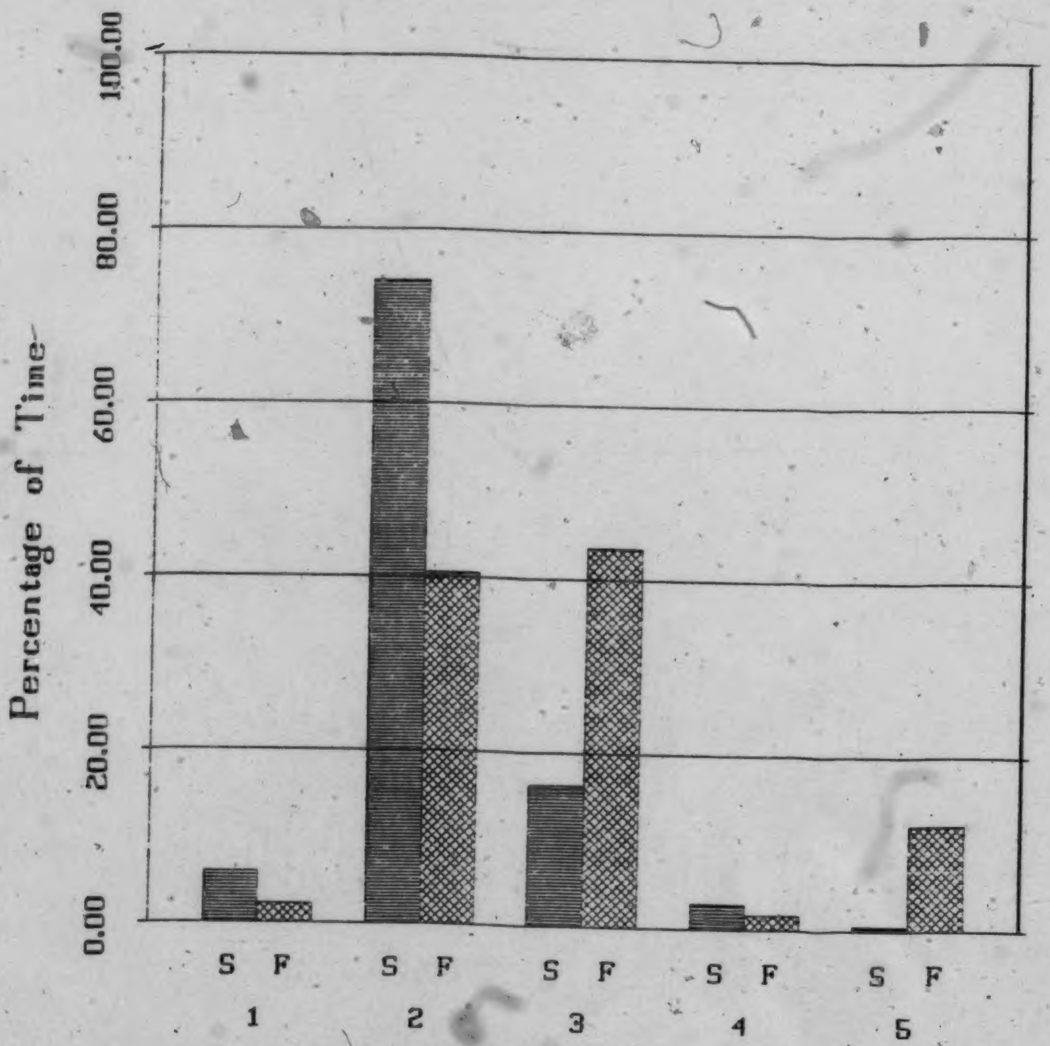

Figure 6 Dean 4 Media by Time

Graph Legend

▤ Spring ▦ Fall

1. Unscheduled Meetings
2. Scheduled Meetings
3. Desk Work
4. Telephone
5. Travel

meetings required only 40.5% of her time. Unscheduled meetings occupied 5.9% of working time during the Spring and 2.2% of working time in the Fall. Telephone calls in the Spring used 2.9% of the Dean's time whereas Fall telephone calls required only 1.7% of her time. Travel increased from 0.5% in the Spring to 12.1% in the Fall.

Dean 5. The data in Figure 7 illustrate the way in which Dean 5's time was distributed during the two observation periods. The activity which consumed the greatest amount of time during the Spring was scheduled meetings (52.7%) and desk work used the second greatest amount of time in the Spring (33.7%). In the Fall these two activities reversed their positions, i.e., desk work required 43.3% of Dean 5's time and scheduled meetings required 35.9%. The portion of time devoted to unscheduled meetings increased from 2.2% in the Spring to 16.4% in the Fall. Telephone calls decreased from 8.2% in the Spring to 2.4% in the Fall. Similarly, travel also was reduced from Spring to Fall (2.5% and 1.9% respectively).

Distribution of the Deans' Time by Individual Category of Activity

Time Spent in Unscheduled Meetings. Data concerning time spent by each of the deans in unscheduled meetings are summarized in Table 5. The number of unscheduled meetings that the deans participated in ranged from 5 to 24 in the Spring and from 14 to 18 in the Fall observational period. The average number of unscheduled meetings per day varied from 1.6 to 8 in the Spring and 4.6 to 6 in the Fall. Time spent in unscheduled meetings during the Spring spanned a range between 26

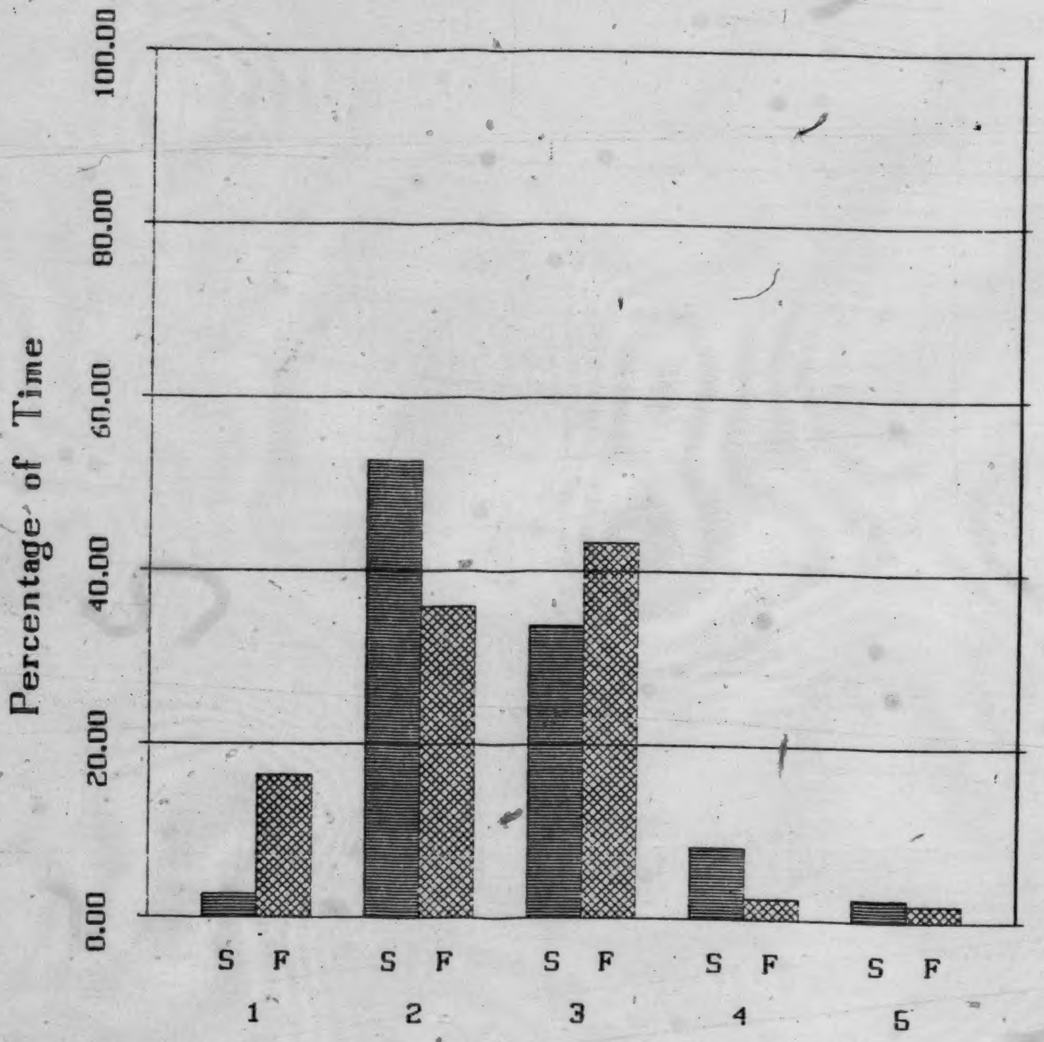

Figure 7 Dean 5 Media by Time

Graph Legend

▤ Spring ▩ Fall

1. Unscheduled Meetings
2. Scheduled Meetings
3. Desk Work
4. Telephone
5. Travel

Table 5

Summary of Time Spent in Unscheduled Meetings

	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of unscheduled meetings	18	14	32	24	16	40	5			13	14	27	9	18	27
Average number per day	6	4.6	5.3	8	5.3	6.6	1.6			4.3	4.6	4.5	3	6	4.5
Time* in meetings	307	276	583	255	153	408	178			86	41	127	26	207	234
Average duration of meetings	17	20	18	11	10	10.5	36			7	3	5	3	12	7.5

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observation data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

minutes and 307 minutes. The average duration of unscheduled meetings was between 3 minutes and 36 minutes. Figure 8 provides a comparison of the proportion of time spent by each dean in unscheduled meetings during Spring and Fall observation periods. Means for each observation period are also shown. The only case in which the percentage of time spent was lower in the Spring than in the Fall was Dean 5 (1.97% and 15.22% respectively). In all other cases where there were two sets of data, the percentage of time was greater in the Spring than in the Fall. The largest percentage of unscheduled meetings was Dean 1 who spent 18.85% of her time in the Spring, 14.58% of her time in the Fall, and 16.69% of all observed working time in unscheduled meetings. Dean 4 spent the least amount of time on this category of activity (5.03% Spring; 1.79% Fall; and 3.18% combined). Dean 2 spent 15.01% of her time during the Spring, 8.59% of her time during the Fall for a combined percentage of 11.72% of her time in unscheduled meetings. Dean 3, for whom there is only Spring data available devoted 11.77% of her time to this type of activity.

Time in Scheduled Meetings. Table 6 summarizes the data related to the scheduled meetings which the deans attended during the Spring and Fall observational periods. The combined figures for each dean are also shown. The range in the number of meetings over a three day observational period extends from 10 to 18. When the two periods were combined the total number of scheduled meetings attended varied from 22 to 30. The average number of meetings per day ranges between 3.3 and 6. The amount of time which the deans spent in scheduled meetings varied a great deal from Dean 2's Spring total of 1088 minutes to Dean 5's Fall

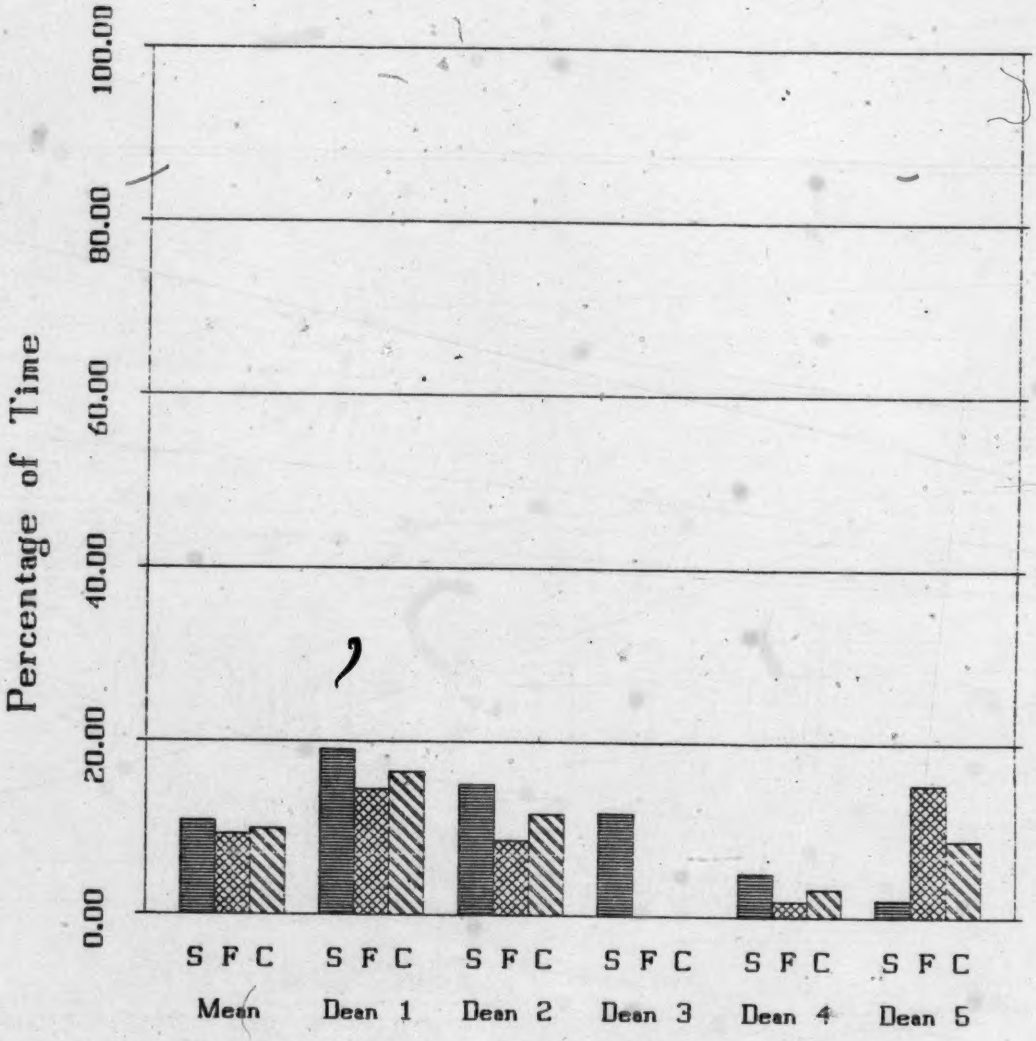

Figure 8 Unscheduled Meetings by Time

Table 6

Summary of Time Spent in Scheduled Meetings

	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of meetings	13	13	26	17	13	30	6			18	12	30	12	10	22
Average number per day	4.3	4.3	4.3	5.6	4.3	5	2			6	4	5	4	3.3	3.6
Time* in meetings	876	824	1700	1088	1044	2092	262			1066	819	1885	495	453	948
Average duration of each meeting	67.3	63.3	65.3	64	77.2	70.6	43.6			59.2	68.2	63.7	41.2	45.3	43.2

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observation data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

total of 453 minutes. Similarly, a wide range is found in the average duration of meetings (a low of 41.2 minutes per meeting to a high of 77.2 minutes per meeting). Figure 9 illustrates the percentage of the deans' time which was spent in scheduled meetings. The mean percentage of time spent in scheduled meetings for all deans during the Spring observations was 48.27%. For the Fall observation period the mean percentage of time spent in scheduled meetings for all deans was 42.44%. The mean was 45.13% when all data were combined. In three cases (Deans 1, 4, and 5) the percentage of time spent in scheduled meetings during the Spring (53.7%, 62.4%, and 38.3% respectively) was greater than the Fall (43.5%, 36.0%, and 33.3% respectively). Only Dean 2 spent a smaller portion of time on scheduled meetings in the Spring (56.4%) than in the Fall (64.1%). Again only Spring data is available for Dean 3 who spent 17.3% of her time in scheduled meetings.

Time Spent on Desk Work. The data presented in Table 7 summarize the deans' desk work activities. The total number of desk work sessions observed in the Spring varied from 26 to 44 while those in the Fall varied from 29 to 63. The Spring range for the average number of desk work sessions per day was 8.6 to 14.6 and for Fall the range was 9.6 to 21. Time spent on desk work ranged from a high of 586 minutes to a low of 234 minutes during the Spring and a high of 881 minutes to a low of 368 minutes in the Fall. The highest average duration of each desk work session in the Spring was 14.3 minutes and the lowest was 7.4. In the Fall the highest average duration of each work session was 30.3 minutes and the lowest was 8.9 minutes. Figure 10 illustrates the comparison of the percentage of time which the deans spent at desk work.

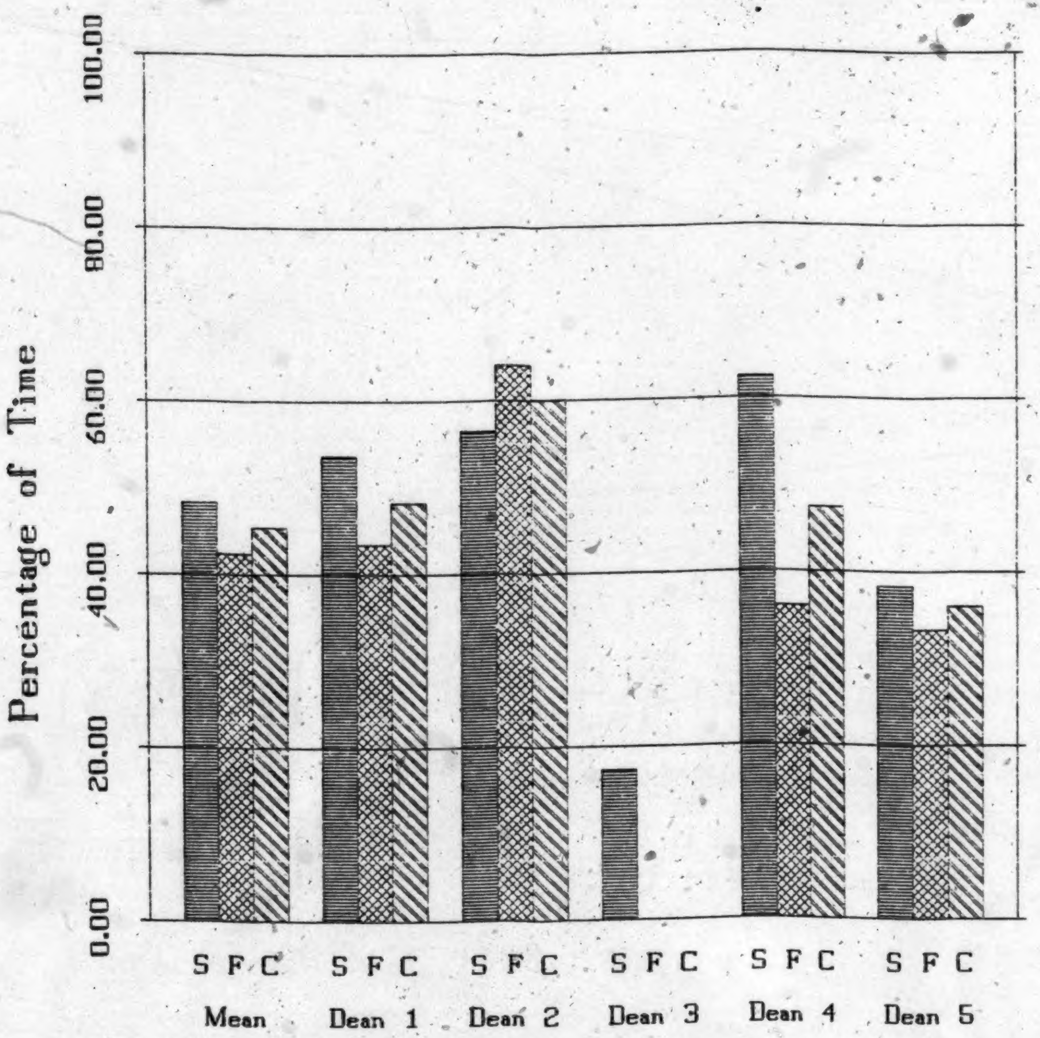

Figure 9 Scheduled Meetings by Time

Graph Legend

▤ S

▦ F

▧ C

Table 7

Summary of Time Spent on Desk Work

	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of desk work sessions	37	63	100	34	30	64	41			26	29	55	44	51	95
Average number per day	12.3	21	16.6	11.3	10	10.6	13.6			8.6	9.6	9.1	14.6	17	15.8
Time* spent on desk work	275	564	839	309	368	677	586			234	881	1115	317	547	864
Average duration of each desk work session	7.4	8.9	8.15	9.0	12.6	10.8	14.3			9	30.3	19.6	7.2	10.7	8.9

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observation data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

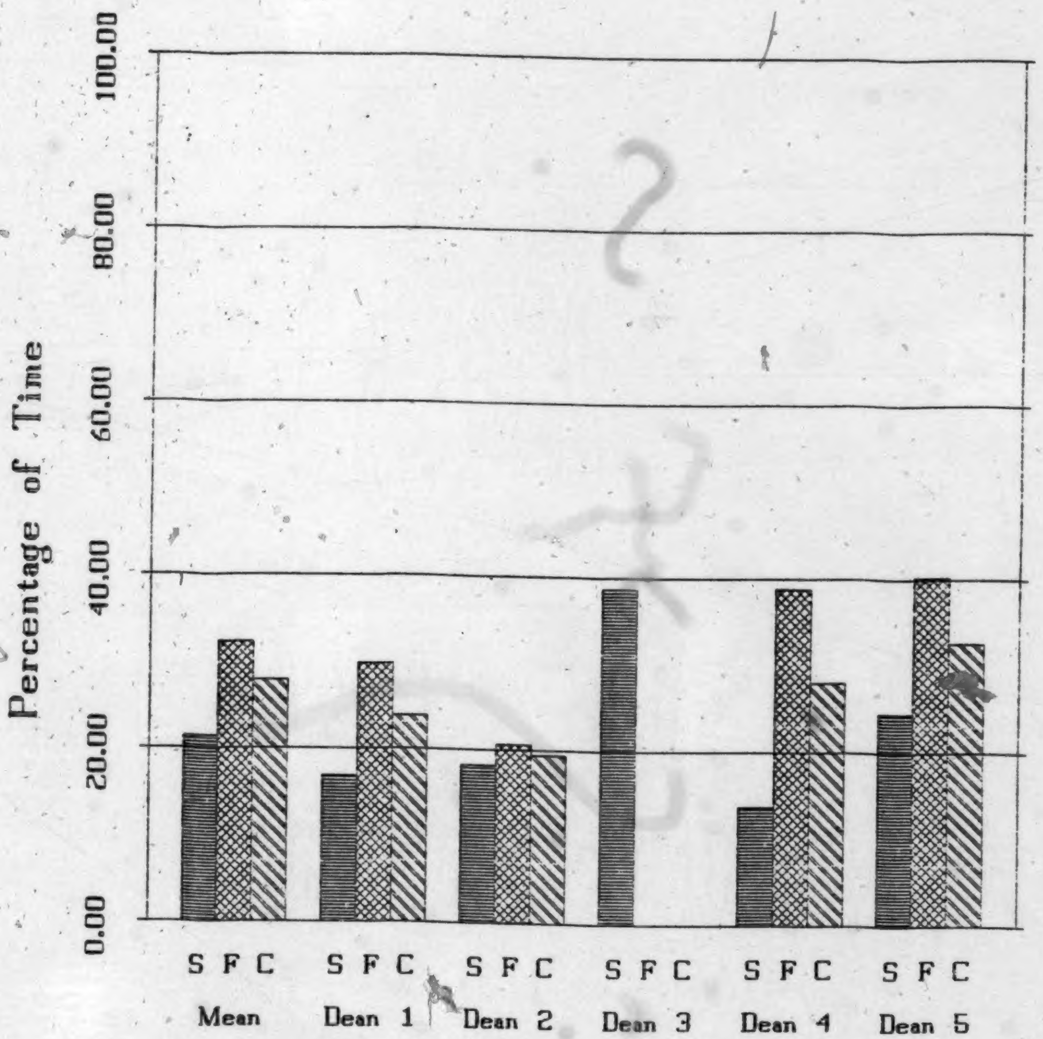

Figure 10 Desk Work by Time

Graph Legend

▤ S
▦ F
▧ C

During the Spring, as shown in Figure 10, the mean time spent at desk work by all of the deans was 21.9% while in the Fall desk work occupied 32.3% of their time. The mean time spent at desk work by all deans when the data from the two observational periods were combined was 27.9%. In all four cases for which there is a full set of observational data the percentage of desk work increased in the Fall as compared to the Spring. Dean 1 spent 16.8% of her time in the Spring at desk work and 29.8% in the Fall. In the Spring, Dean 2 spent 18.2% of her time at desk work and, in the Fall, she spent 20.6% of her time in this activity. Only Spring data is available for Dean 3 who spent 38.7% of her time at desk work. This activity demanded 13.7% of Dean 4's time in the Spring and 38.8% of her time in the Fall. In the Spring Dean 5 was occupied by desk work for 24.5% of her time and in the Fall desk work required 40.2% of her time.

Time Spent on Telephone Calls. Table 8 presents a summary of the deans' activities which involved telephone calls. The number of telephone calls in which the deans were involved in the Spring varied from 13 to 36. The Fall number of telephone calls ranged between 9 and 29. The daily average for telephone calls in the Spring was between 4.3 and 12; for the Fall it was between 3 and 9.6. The highest amount of time spent on telephone calls in the Spring observation period was 108 minutes and the lowest was 30 minutes. In the Fall the highest amount of time spent on telephone calls was 84 minutes and the lowest amount of time was 31 minutes. The average duration of telephone calls in the Spring ranged from 2.1 minutes to 3.2 minutes. In the Fall, the duration of telephone calls was between 1.8 and 3.8.

Table 8

Summary of Time Spent on Telephone Calls

	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of telephone calls	33	29	62	17	12	29	13			16	9	25	36	17	53
Average number per day	11	9.6	10.3	5.6	4	4.8	4.3			5.3	3	4.1	12	5.6	8.8
Time* spent on telephone calls	108	84	192	36	34	70	30			43	35	78	77	31	108
Average duration of each telephone call	3.2	2.9	3	2.1	2.8	2.4	2.3			2.6	3.8	3.2	2.1	1.8	2

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observation data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

Figure 11 graphically compares the percentage of time which the deans spent on telephone calls. The mean percentage of time spent on telephone calls by all deans in the Spring was 3.7% and in the Fall it was 2.5%. The combined percentage of time spent in this activity was 3.09%. In all four cases when there was a full set of observational data, the dean spent more time on telephone calls in the Spring than in the Fall. Dean 1 was occupied by telephone calls 6.6% of the time in the Spring and 4.5% of the time in the Fall. In the Spring, Dean 2 spent 2.1% of her time on telephone calls while she spent only 1.8% of her time on this activity in the Fall. Dean 3 was occupied by telephone calls for 1.9% of her time during the Spring, which is the only observational period for which data is available. Dean 4 used 2.5% of her time in the Spring observational period and 1.5% of her time in the Fall for telephone calls. Dean 5 devoted 5.9% of her time during Spring and 2.2% of her time in the Fall observation to telephoning.

Time Spent on Travel. The data related to the activity units which were designated as travel are summarized in Table 9. The number of units of travel in the Spring ranged from 2 to 5 and in the Fall they ranged from 3 to 7. The average number of travel units per day in the Spring varied from .6 to 1.6 and in the Fall the daily average was between 1 and 2.3. The amount of time which the deans spent on travel in the Spring varied between 5 minutes and 57 minutes. In the Fall the amount of time spent on travel varied between 24 minutes and 245 minutes. The highest average for duration of a travel unit in the Spring was 11.4 minutes and the lowest was 1.6 minutes. The highest Fall average for the duration of a travel unit was 81.6 minutes and the

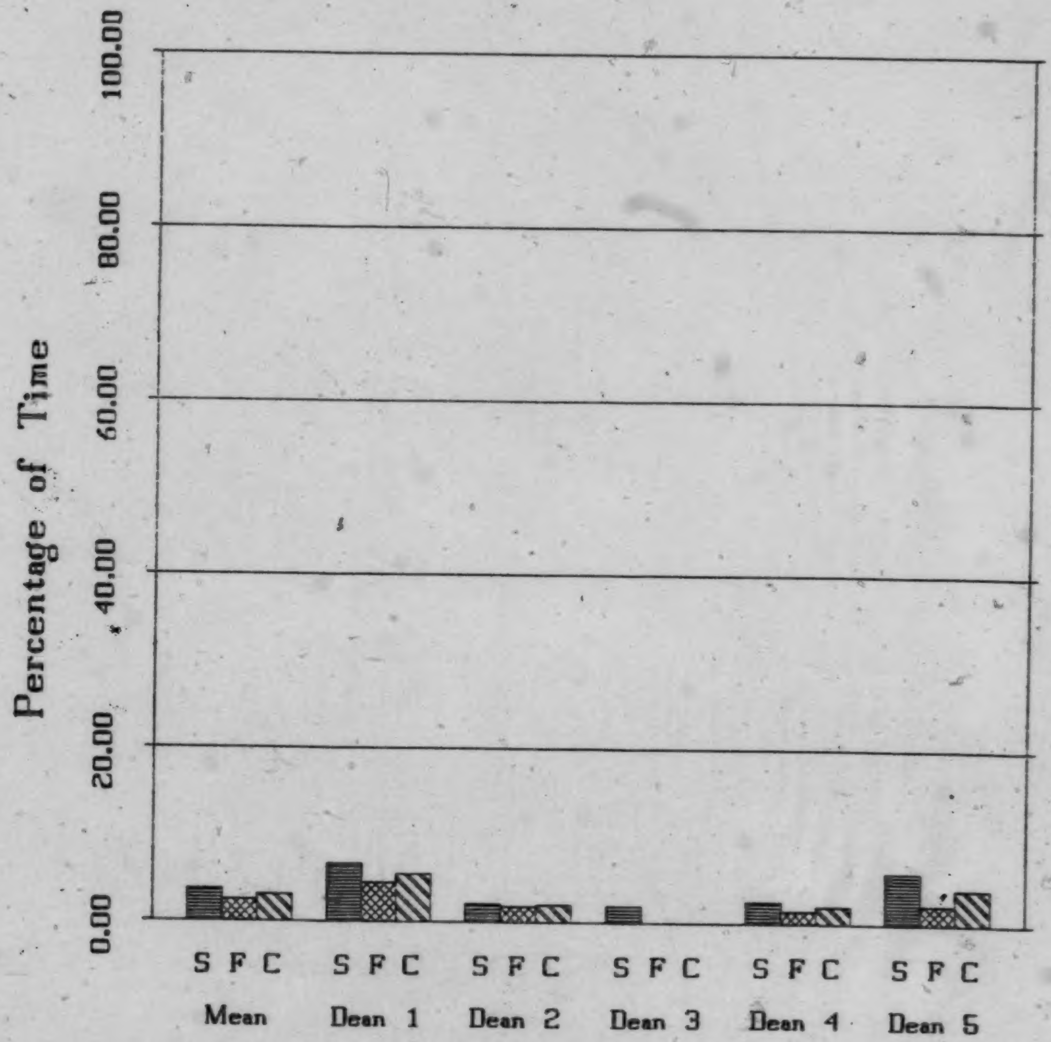

Figure 11 Telephone Calls by Time

Graph Legend

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▩ F
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Table 9

Summary of Time Spent on Travel

	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of travel units	3	7	10	5	3	8	2			2	6	8	3	3	6
Average number per day	1	2.3	1.6	1.6	1	1.3	.6			.6	2	1.3	1	1	1
Time* spent on travel	5	27	32	57	37	94	13			8	245	253	24	24	48
Average duration of each travel unit	1.6	3.8	2.7	11.4	12.3	11.85	6.5			4	81.6	42.8	8	8	8

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observation data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

lowest was 3.8 minutes. A graphic illustration of the percentage of time which the deans spent on travel is presented in Figure 12. In the Spring, the mean percentage of time spent on travel was 1.3%. This figure increased to 4.5% during the Fall observation period. When the two sets of data were combined the mean time spent on travel was 2.7%. Two of the deans (Deans 1 and 4) increased the amount of time which they spent on travel from the Spring (.3% and .5% respectively) to the Fall (1.4% and 10.8% respectively). Deans 2 and 5 reduced their percentage of travel from the Spring (3.35% and 1.85% respectively) to the Fall (2.0% and 1.75% respectively). Only Spring data were available for Dean 3 who spent .8% of her time on travel.

Time Spent on Tours. During the entire 27 days of observation not one of the deans made any tours or visits as this term was operationally defined for purposes of this study (see Chapter 3).

The Nursing Dean's Use of Time: A Composite

In this section, the data from the preceding three sections of this chapter are synthesized into a composite of the manner in which the deans of nursing in the sample which was observed, spent their working time. Figure 13 provides a comparison of the total time worked by the deans during the observation periods. The mean number of minutes worked by the deans during the Spring observation was 1568 minutes or 26.13 hours. In the Fall observation period the mean number of minutes worked was 1826 minutes (30.43 hours). The combined mean over both observational periods was 3394 minutes (56.56 hours). Deans 1, 4, and 5 increased their total time worked from the Spring (1630 minutes, 1709

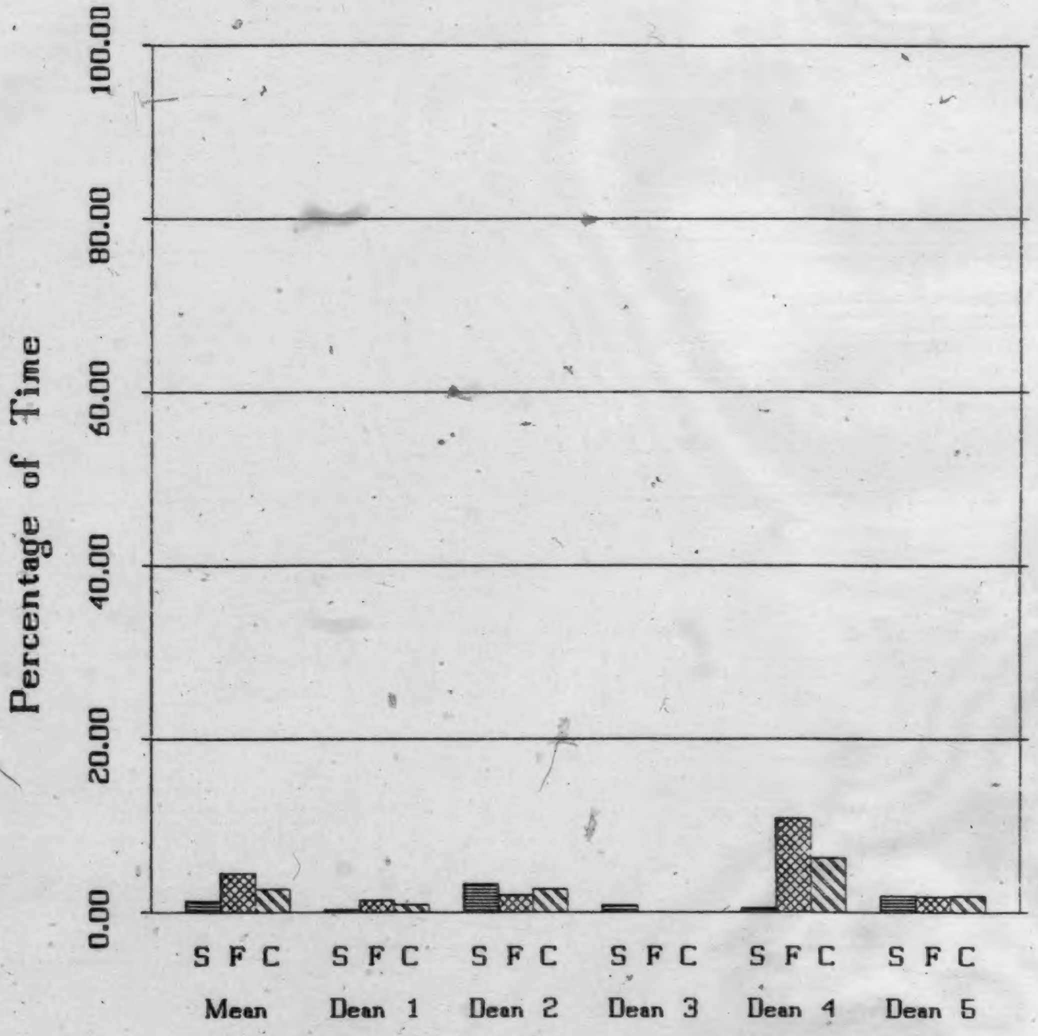

Figure 12 Travel by Time

Graph Legend

▤ S
▩ F
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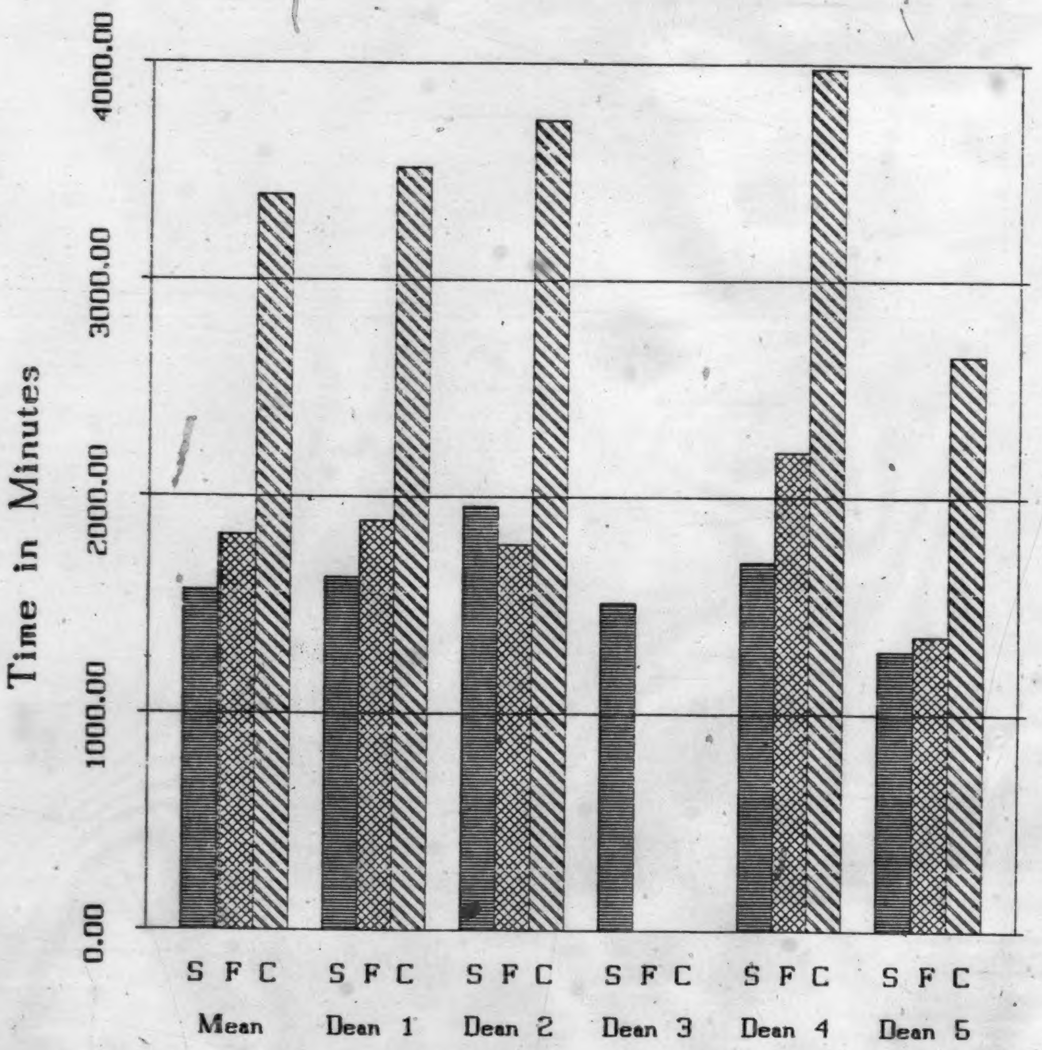

Figure 13 Total Work Time During Observation

Graph Legend

▤ S
▩ F
▧ C

minutes, and 1292 minutes respectively) to the Fall (1893 minutes, 2207 minutes, and 1360 minutes respectively). Dean 2 decreased her total time worked from 1957 minutes (32.61 hours) in the Spring to 1781 minutes (29.68 hours) in the Fall. Dean 3 worked a total of 1512 minutes (25.2 hours) during the Spring.

Average time worked per day, as illustrated in Figure 14, showed a Spring mean of 522 minutes (8.7 hours), a Fall mean of 609 minutes (10.15 hours) and a combined mean over the two periods of 565 minutes (9.41 hours). Contrasting the Spring observation period to the Fall observation period shows that Dean 1 increased the average length of her day from 543 minutes (9.05 hours) to 631 minutes (10.51 hours). Dean 2 showed a decrease from 652 minutes (10.8 hours) to 593 minutes (9.8 hours). Only Spring data is available for Dean 3 who worked an average of 504 minutes (8.48 hours). Deans 4 and 5 also showed increases from Spring (569 minutes and 430 minutes respectively) to Fall (757 minutes and 453 minutes respectively).

Figure 15 provides a graphic representation of the total number of activities in which the deans engaged during the observational periods. The mean number of activities for the Spring was 125 and in the Fall it was 111 while the combined mean over both periods was 236. In two of the cases (Deans 1 and 4) for which there is a complete set of data, the total number of activities increased very slightly from Spring (140 and 91 respectively) to Fall (144 and 93 respectively). Deans 2 and 5 showed a decrease in the number of activities from Spring (118 and 130 respectively) to Fall (85 and 121 respectively). Dean 3 showed a total of 75 activities during the Spring observation.

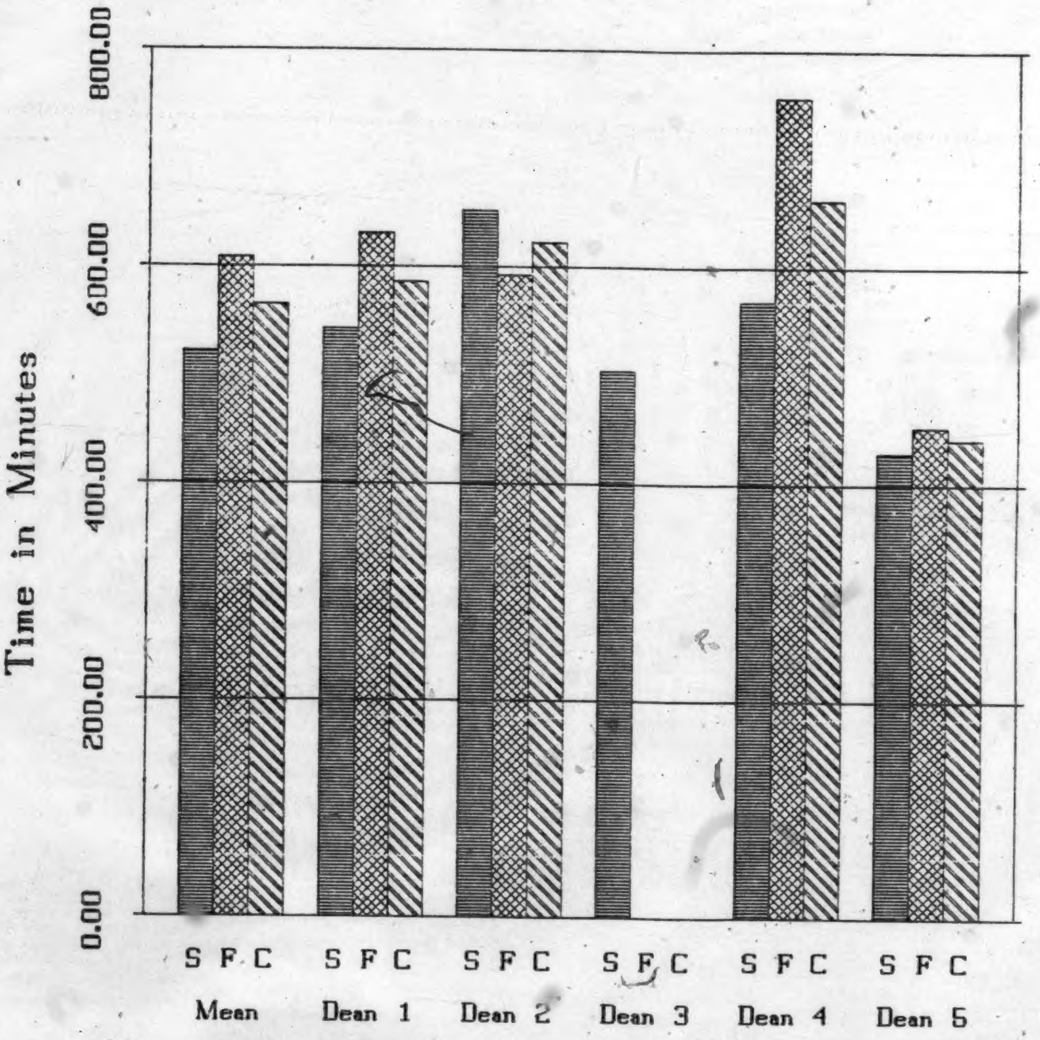

Figure 14 Average Time Worked Per Day

Graph Legend

▤ S ▩ F

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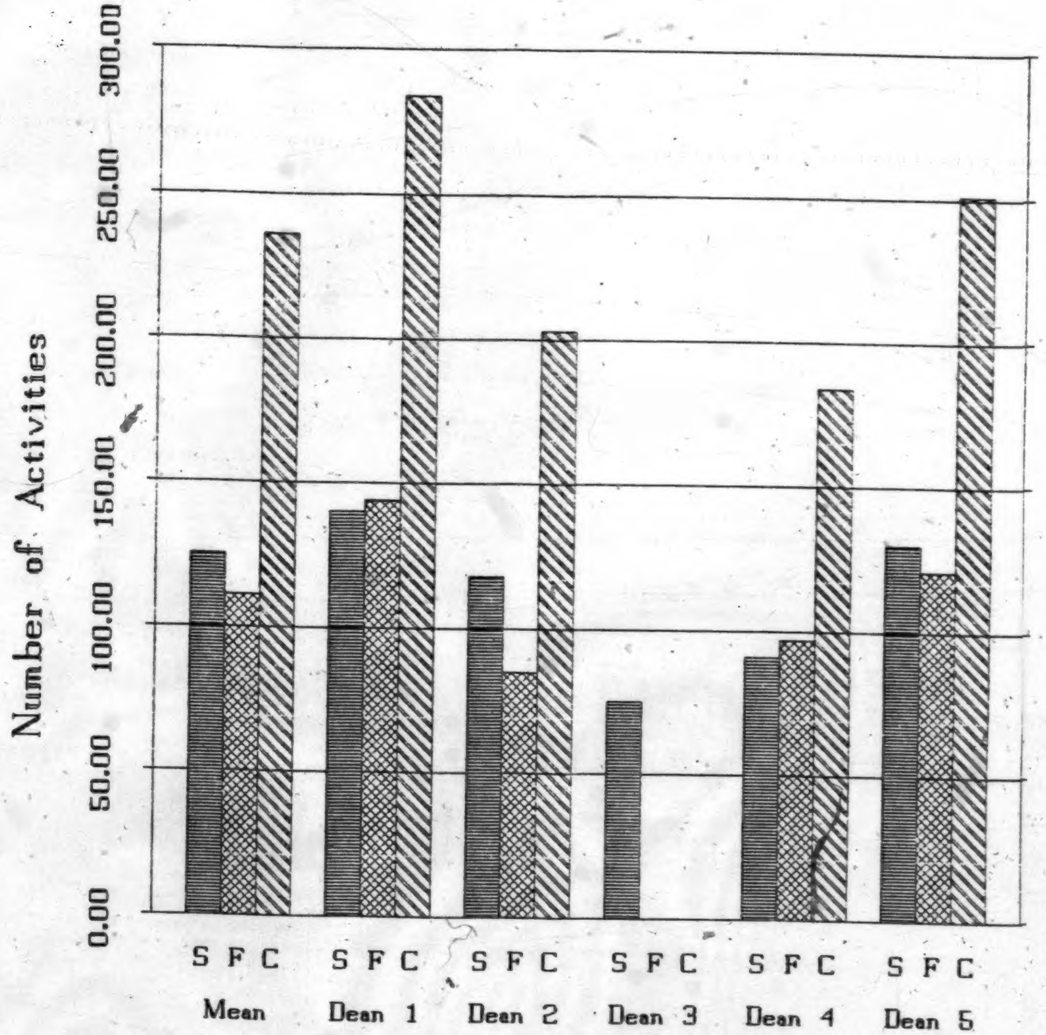

Figure 15 Total Number of Activities Per Dean

Graph Legend

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The average number of activities per day, as illustrated by Figure 16, showed exactly the same means for the Spring and Fall observation periods and for the combined period. Dean 1 increased the number of activities per day in the Fall by 1 (47, Spring; 48, Fall). Dean 2 decreased her average number of activities per day from 39.3 in the Spring to 28.3 in the Fall. Dean 3 showed an average of 25 activities per day during the Spring. In the Spring, Dean 4 showed an average of 30.3 activities per day. This figure increased slightly to 31 during the Fall observation. Dean 5 performed an average of 43.3 activities per day in the Spring and 40.3 in the Fall.

Figure 17 is an illustration of the average duration of an activity. The means for Spring, Fall and the two periods combined were 15 minutes, 17 minutes, and 16 minutes respectively. In all cases for which there is a complete set of data, the average duration of an activity was greater in the Spring than in the Fall. Dean 1 increased from 11.6 minutes in the Spring to 13.4 minutes in the Fall. In the Spring, the average duration of Dean 2's activities was 16.5 minutes and in the Fall it was 21 minutes. Dean 3 showed an average duration of 20 minutes. Deans 4 and 5 had an average duration of activity of 18.8 minutes and 10 minutes respectively for the Spring observation and 24.4 minutes and 11.2 minutes respectively for the Fall observation.

Table 10 summarizes the mean times and numbers of the deans' activities for the Spring and Fall observations and for the combined data from the two observation periods.

Figure 18 graphically illustrates the manner in which the five deans of nursing collectively spent their time during the Spring. The

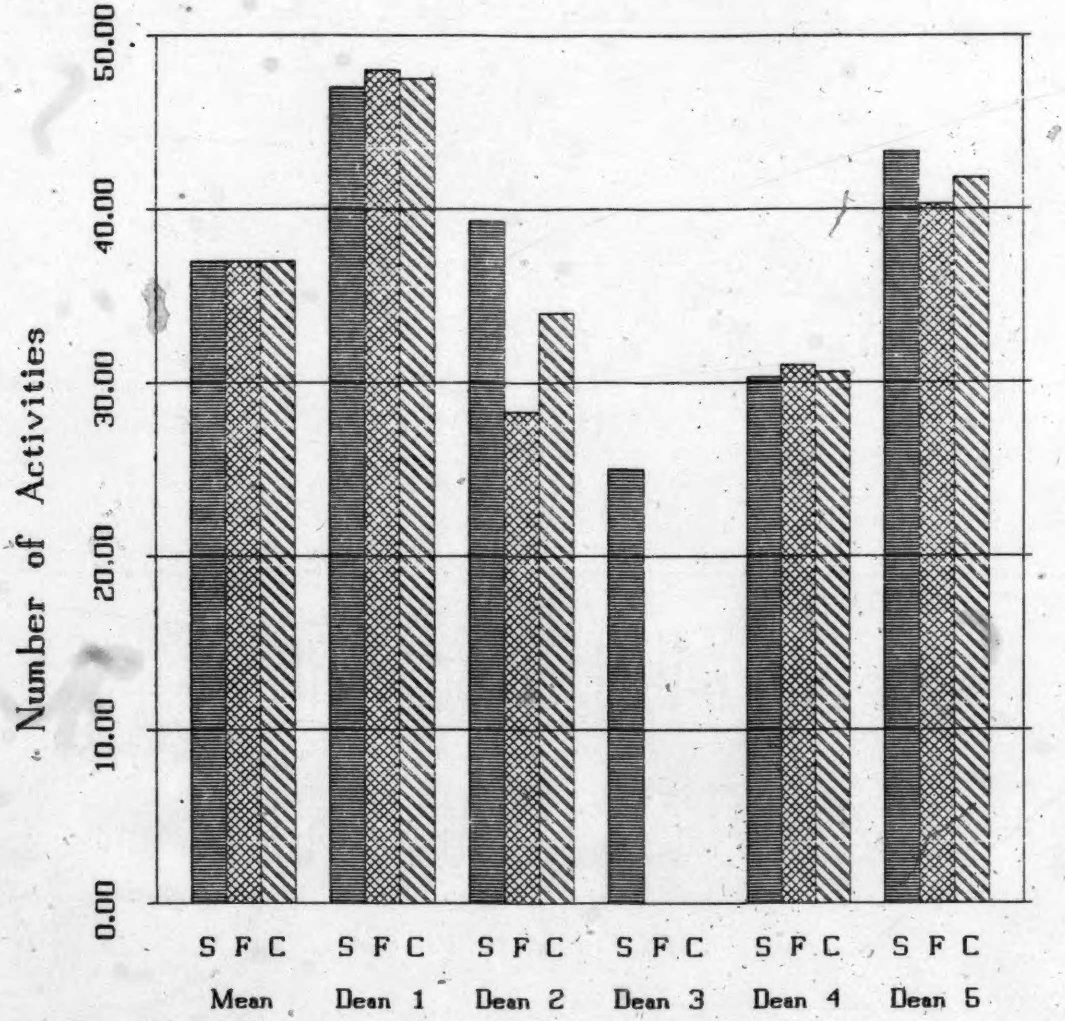

Figure 16 Average Daily Number of Activities

Graph Legend

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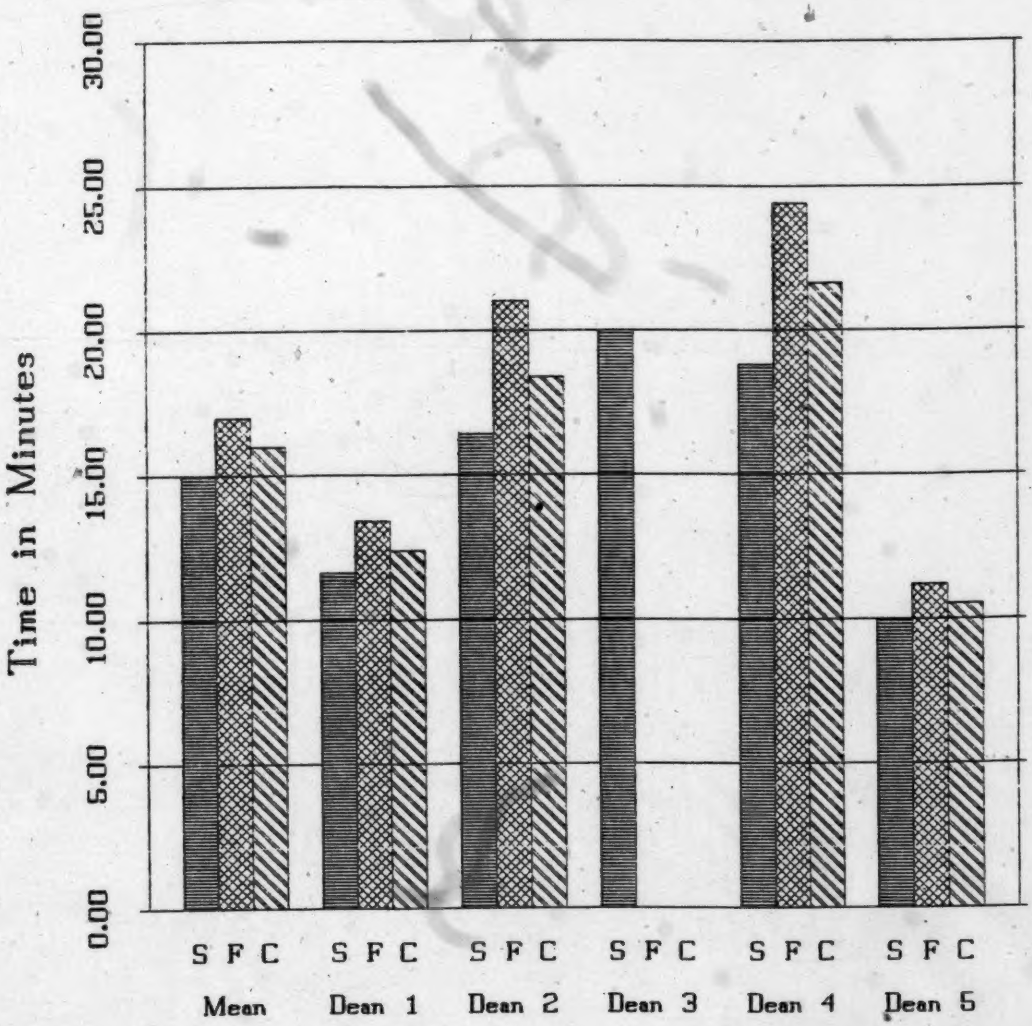

Figure 17 Average Duration of any Activity

Graph Legend

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Table 10

Mean Times and Numbers of Deans' Activities Spring, Fall, and Combined Observation Periods

Activity	Spring Mean (3 days)	Fall Mean (3 days)	Combined Mean
Total time* worked during observation	1620+	1826+	3446+(1723+)**
Time worked per day	540	609	574
Time in Unscheduled Meetings	170	169	169.5
Time in Scheduled Meetings	757	775	766
Time at Desk Work	344	590	467
Time on Telephone Calls	59	46	52.5
Time on Travel	21	83	47
Time on Tours	0	0	0
Total Number of Activities	125	111	236 (118)**
Number of Activities per day	37	37	37
Duration of an activity	16	17	16.6

* All times are in minutes and are rounded to the nearest minute.

+ Totals are greater than sums of activities because of the deletion of certain unclassified activities, such as interactions with secretaries, or activities of a personal nature.

** Figures in parentheses represent a combined mean for a three day period for purposes of comparison with the Spring and Fall means.

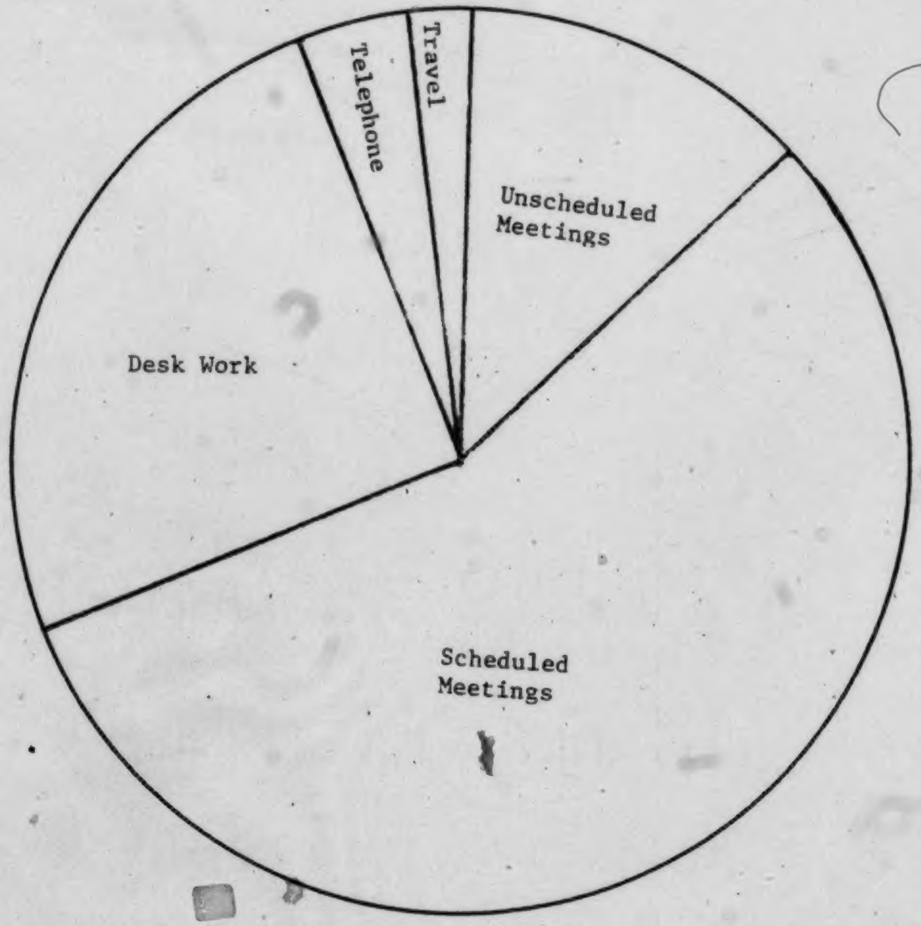


Figure 18

Proportions of the Nursing Deans' Time Spent on Six* Categories of Activities During the Spring: A Composite

* Only five categories are shown because no tours were taken by any of the subjects during this period of observation.

classification system used included six categories of activities: unscheduled meetings, scheduled meetings, desk work, telephone calls, travel and tours. The deans were found to devote a percentage of their time to all of those activities except tours. No time at all was spent, by any of the subjects who contributed to the generation of the composite model, participating in tours, as operationally defined for this study. During the Spring, the subject deans were found to use 12.5% of their collective time in unscheduled meetings, 56.03% of their collective time in scheduled meetings, 25.46% of their time at desk work, 4.3% of their time on telephone calls, and 1.5% of their time on travel. Three activities (scheduled and unscheduled meetings and desk work) occupied 94% of the subject deans' time during the Spring.

During the Fall, as shown in Figure 19, the deans again did not utilize any of their collective time in making tours. Unscheduled meetings demanded 10.16% of the deans' collective time during the Fall. Scheduled meetings accounted for 46.69% of their composite time while desk work absorbed 35.47% of their time. Again, these three activities occupied the majority of the subject deans' available working time, i.e., 93%. Travel required 4.99% of the subjects' composite time during the Fall and telephone calls required 2.76% of their time.

When the data from these two separate time periods were combined to create an aggregate of the subject deans' use of time then the graphical illustration represented in Figure 20 emerged. The aggregate indicates that the Deans of Nursing in this study spent 11.28% of their time in unscheduled meetings, 10.99% of their time in scheduled

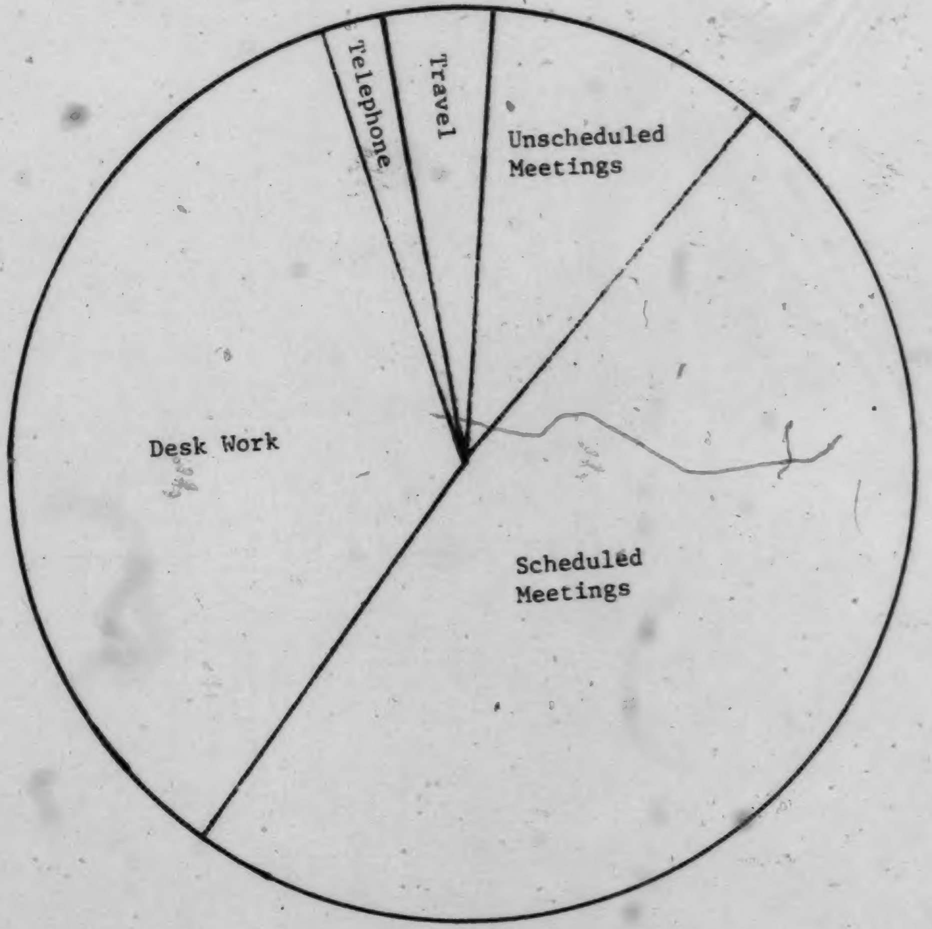


Figure 19

Proportions of the Nursing Deans' Time Spent on Six* Categories of Activities During the Fall: A Composite

* Only five categories are shown because no tours were taken by any of the subjects during this period of observation.

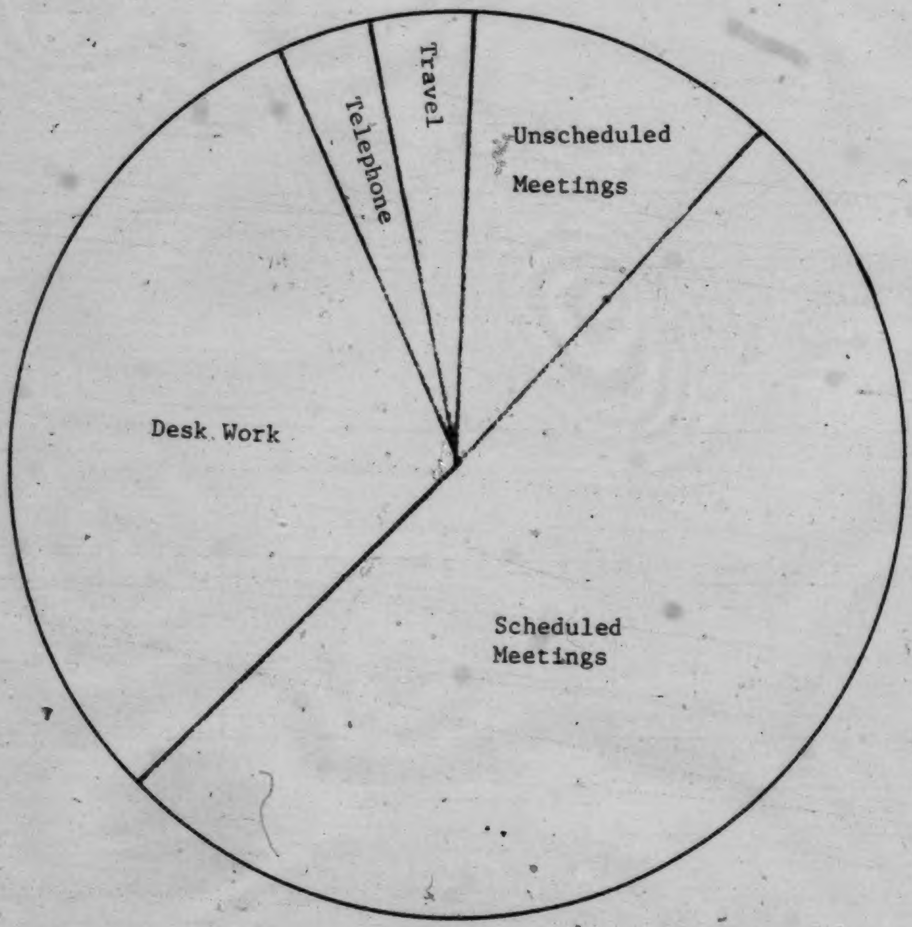


Figure 20

Proportions of the Nursing Dean's Time Spent on Six* Activities: An Aggregate

*Only five categories are shown because no tours were taken by any of the subjects during either of the observation periods.

meetings, 31.09% of their time on desk work, 3.49% of their time on telephone calls, and 3.12% of their time on travel. Again, no time would be spent on tours since the subjects who comprised the sample on which this aggregate is based did not elect to utilize their time in that activity. Also, the majority of the subject deans' time in the aggregate model, as in the two composite models, was devoted to three activities, namely unscheduled meetings, scheduled meetings, and desk work, which would occupy 93% of their time.

Participants in the Deans' Activities

Overview

Time by classification of people with whom the deans had contact during the Spring observation period is summarized in Table 11. The categories which were used in presenting the data are those which evolved from the data, as discussed in Chapter 3. Interactions with secretaries, and contacts of a personal nature were not included in this classification system. In some cases the sum of the times given might be greater than the total time worked during the Spring observation as shown in Table 2. This is due to the fact that when the participants in a given activity were of multiple categories then each category was coded. For example, when a Faculty meeting attended by both faculty members and students was coded, one activity and its duration would be tallied in both the student column and the subordinates column. In other words activities having multiple categories of participants were multiply coded. Similar data for the Fall observation period are summarized in Table 12 and Table 13 presents a summary which resulted

Table 11

Summary of the Deans' Time* by Category of Participant
for the Spring Observation Period

Classification by Participants	Dean					
	Mean	1	2	3	4	5
Solitary Activities	344	275	309	586	234	317
Joint Activities	1305	1178	1791	995	1652	911
Intra-institutional participants	883	754	1331	553	1097	682
Superordinates	7.4	0	35	0	0	2
Subordinates	493	210	1220	79	540	417
Peers	215	435	68	334	340	1
Students	128	110	8	140	149	231
Extra-institutional participants	426	444	461	443	553	229
Representatives of professional assocations	44	220	0	0	0	0
Representatives of other institutions	345	136	461	426	506	198
Government representatives	7	0	0	0	36	0
Other	15.8	20	0	17	11	31

* All times are given in minutes. The sum of the times for each separate category may be greater than the total time worked in the observation period (see Table 2) because when multiple categories of participants were present at a given activity, they were multiply coded.

when the data from the two observation periods are combined.

During the Spring observation, as Table 11 shows, all of the deans spent more time on and devoted a greater number of activities to activities in which others were also involved (joint activities) than on solitary activities. When joint activities were subdivided into those activities which involved participants from inside the institution (intra-institutional) and those from outside the institution (extra-institutional), then the greater amount of time and the greater number of activities were spent with the intra-institutional participants. Only two of the deans participated in any activities in which their administrative superordinates were also involved. By far the largest amount of time was spent on activities in which the deans' administrative subordinates also participated. The amount of time that the deans spent in activities with their administrative peers varied from Dean 5 who spent 1 minute on activities that involved her administrative peers to Dean 1 who spent 435 minutes on activities which involved her peers. All deans spent some time on activities involving students but again there was a wide range within the figures. Dean 2 spent 8 minutes on activities in which students also participated and Dean 5 spent 231 minutes on activities involving students. Only one of the deans had contact with representatives of either a professional association or the government. The greatest amount of contact with extra-institutional participants was in the category involving representatives of other institutions. The category labelled "other" required only a minor amount of the deans' total time and activity.

As shown on Table 12, during the Fall all of the deans again devoted more of their time to joint activities than to solitary activities, and to intra-institutional activities as opposed to extra-institutional activities. Among the intra-institutional sub-categories, subordinates required the most time with a range from 211 minutes to 492 minutes. Contact with peers varied from 5 minutes to 511 minutes. Students utilized the deans' time in a range from 75 minutes (Dean 5) to 344 (Dean 2). The least amount of contact between the deans and intra-institutional participants was with the deans' administrative superordinates. Among the extra-institutional sub-categories, the greatest amount of contact by the deans in the Fall observation period was with those who were representatives of other institutions. None of the deans had contact with government representatives. Only one dean had contact with representatives of a professional association and only two deans utilized a minor amount of time in interactions with individuals who were determined to belong in the "other" category.

Table 13 presents data which result when the data from the Spring and Fall observation periods are combined. The data provide a composite summary of participants in the activities during the observation of four deans for six days each and one dean for three days. These observations occurred over a total of 27 working days. In all cases joint activities exceeded solitary activities in terms of the amount of time and the number of activities which the deans invested. Similarly, intra-institutional activities exceeded extra-institutional activities

Table 12

Summary of the Deans' Time by Category of Participant
for the Fall Observation Period

Classification by Participants	Mean	Dean 1	Dean 2	Dean 3	Dean 4	Dean 5
Solitary Activities	590	564	368	Not available for observation in the Fall.	881	547
Joint Activities	1223	1399	1315		1291	888
Intra-institutional participants	884	1015	874		1086	562
Superordinates	133	160	240		129	2
Subordinates	350	430	268		211	492
Peers	175	177	5		511	8
Students	225	248	344		234	75
Extra-institutional participants	335	384	458		205	294
Representatives of professional associations	70	282	0		0	0
Representatives of other institutions	263	102	458		198	292
Government representatives	0	0	0		0	0
Other	7	0	0		7	20

* All times are given in minutes and are rounded to the nearest minute. The sum of the times for each separate category may be greater than the total time worked in the observation period (see Table 3) because when multiple categories of participants were present at a given activity, they were multiply coded.

Table 13

Summary of the Deans' Time* by Category of Participant for the Total Observation Period (Spring Plus Fall)

Classification by Participants	Mean	Dean 1	2	3**	4	5
Solitary Activities	934	839	677	586	1115	864
Joint Activities	2528	2576	3106	995	2942	1799
Intra-institutional participants	1767	1769	2205	553	2183	1244
Superordinates	140	160	275	0	129	4
Subordinates	843	639	1488	79	751	909
Peers	380	611	73	334	851	9
Students	353	358	352	140	383	306
Extra-institutional participants	761	827	919	443	759	523
Representatives of professional associations	114	502	0	0	0	0
Representatives of other institutions	608	238	919	426	704	490
Government representatives	7	0	0	0	36	0
Other	22.8	20	0	17	18	51

---

* All times are given in minutes and are rounded to the nearest minute. The sum of the times for each separate category may be greater than the total time worked in the observation period (see Table 4) because when multiple categories of participants were present at a given activity, they were multiply coded.

** Only Spring data available.

in all cases. Of the four deans for whom there is a complete set of data, all had at least 1 interaction with her administrative superordinate although the length of time involved varied from 4 minutes to 275 minutes. The greatest amount of contact among all of the participant sub-categories was the subordinate category. The amount of time and the number of interactions with peers ranged from Dean 5 with 9 minutes to Dean 4 with 851 minutes. All deans had contact with students as shown in the combined Spring and Fall observational data in Table 13. The category among the extra-institutional participants which showed the greatest amount of contact by the deans was with representatives of other institutions. Only one dean had interactions with representatives of professional associations. A different dean had the only contact with government representatives. All deans except one had minimal interactions with categories of individuals who were classified as belonging in the "other" category.

Individual Deans' Distribution of Time Among the Categories of Participants

Dean 1. Figure 21 illustrates the manner in which Dean 1 distributed her time among the categories of participants during the two periods of observation. In the Spring observation period Dean 1 spent 17% of her time on solitary activities whereas in the Fall she spent 30% of her time on solitary activity. In the Spring, joint activities demanded 72% of Dean 1's time and, in the Fall, this figure increased slightly to 74%. Intra-institutional and extra-institutional activities required 46% and 27%, respectively, of the Dean's time during the Spring

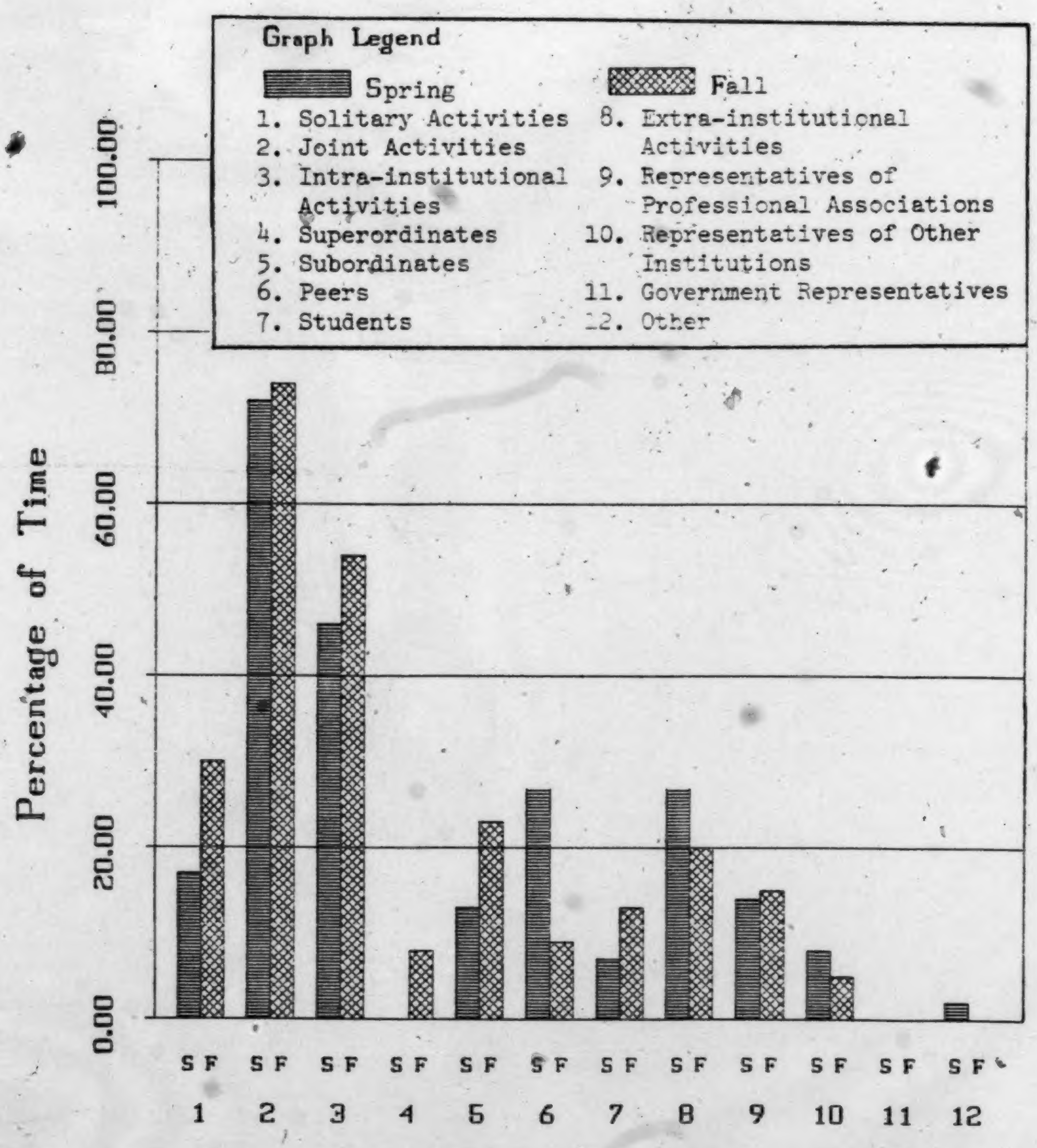


Figure 21 Dean 1 Participants by Time

whereas they required 54% and 20% respectively in the Fall. Dean 1 spent no time with her administrative superordinates during the Spring and only 8% of her time with them during the Fall observations. Subordinates utilized 13% and 23% of Dean 1's time during the Spring and Fall respectively. Peers demanded 27% of Dean 1's Spring working time but only 9% of her Fall working hours. Dean 1 devoted 7% of her time during the Spring to interactions with students and 13% of her time in the Fall to them. Extra-institutional participants utilized 27% of the Dean's time during the Spring but this figure was reduced to 20% during the Fall. Time spent with representatives of professional associations stayed relatively the same from Spring to Fall (14% and 15% respectively). Representatives of other institutions were given 8% of Dean 1's time during the Spring and 5% of her time during the Fall. No time was spent with government representatives during either observational period. Only 2% of Dean 1's Spring working time was spent with others not classified among the preceding categories; during the Fall, no time was spent with anyone not classified above.

Dean 2. The categories of participants on which Dean 2 chose to spend her time during the Spring and Fall observational periods are compared in Figure 22. There were more joint activities than solitary activities during both the Spring and Fall observations. Similarly, there were more Spring and Fall interactions with intra-institutional participants (68% and 49% respectively) than with extra-institutional participants during Spring and Fall (24% and 26% respectively). Dean 2 spent 2% of her Spring working hours and 13% of her Fall working hours in activities which also involved her administrative superordinates.

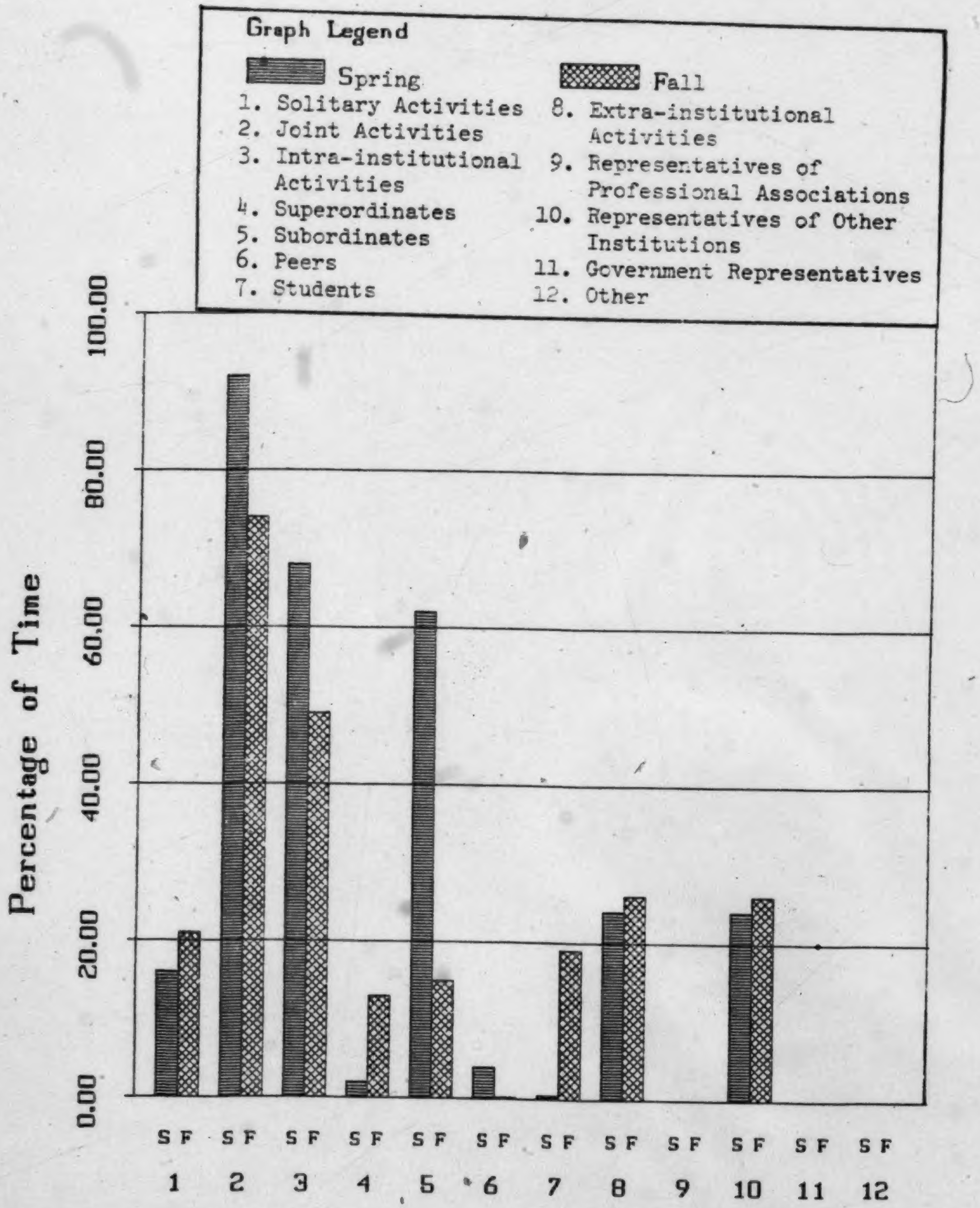


Figure 22 Dean 2 Participants by Time

Administrative subordinates demanded 62% of Dean 2's time during the Spring observations but only 15% of her time during the Fall observations. Only 4% of the Dean's time in the Spring was occupied by interactions with administrative peers. This figure was reduced even lower in the Fall (0.2%). Contact with students during the Spring was only 0.5% of Dean 2's time; however, this increased to 19% during the Fall. No time was spent with representatives of professional organizations or the government during either of the observational periods. Representatives of other institutions occupied 24% of the Dean's time in the Spring and 26% of her time in the Fall. No one was seen during either of the observation periods who could not be classified in one of the categories above.

Dean 3. As noted previously, only Spring data are available for Dean 3. As illustrated in Figure 23, solitary activities were exceeded by joint activities in the Spring observation of Dean 3 and intra-institutional interactions exceeded extra-institutional ones. Dean 3 spent no time with her administrative superordinates and only 5% of her time with her administrative subordinates. The greatest amount of contact (22%) with participants classified in the intra-institutional sub-categories occurred with those categorized as being peers. Students received 9% of Dean 3's time. Her remaining time was occupied by representatives of other institutions (28%) and by individuals not fitting the operational definitions of the previous categories (1%). No time was spent with representatives of either professional associations or the government during the period of observation.

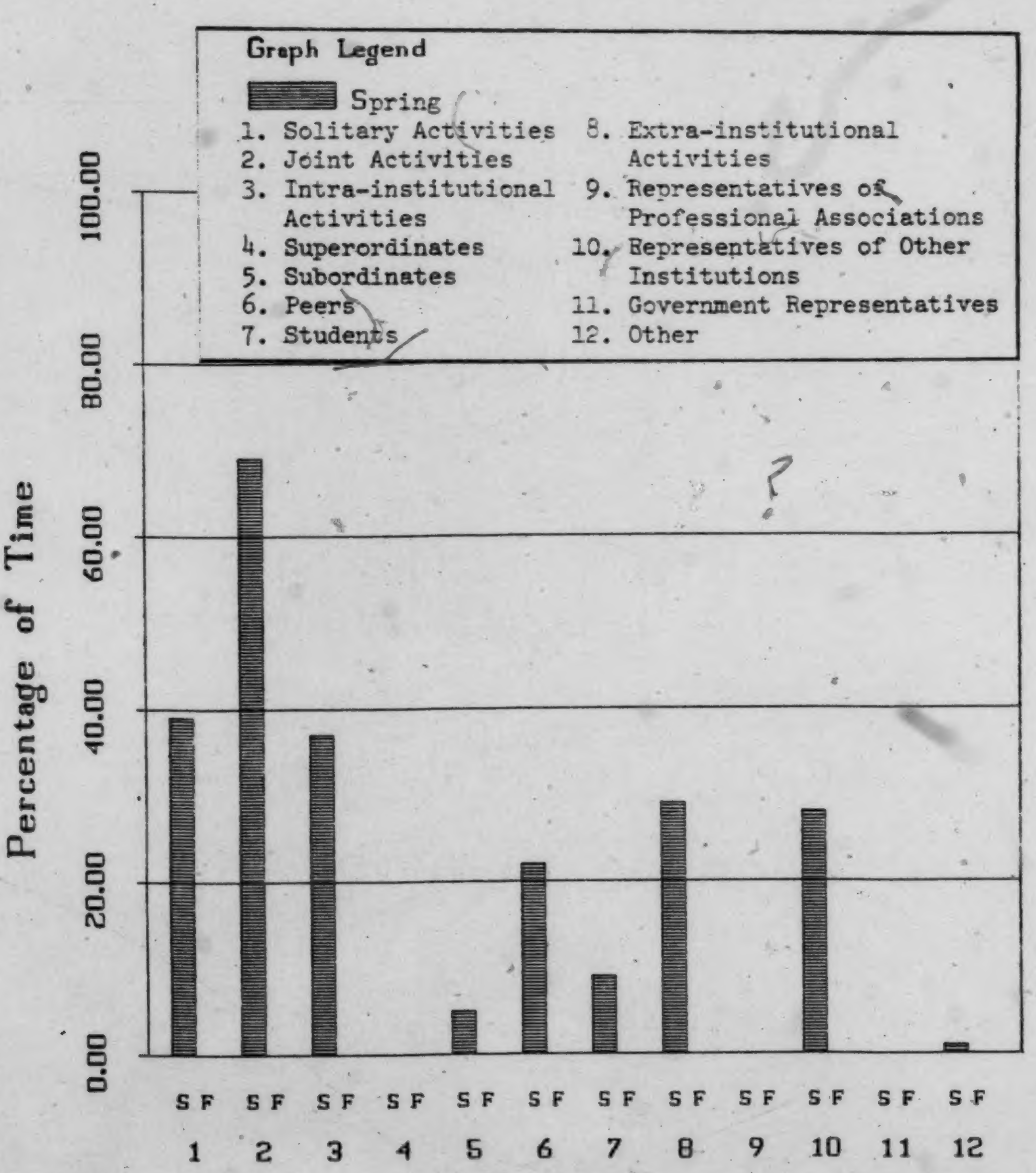


Figure 23 Dean 3 Participants by Time

Dean 4. The distribution of Dean 4's time among the various categories of participants is shown in Figure 24 for the Spring and Fall observation periods. During the Spring joint activities required a great deal more of the Dean's time than did solitary activities. In the Fall, joint activities continued to require the larger percentage of time but not to the same extent as in the Spring. Intra-institutional activities in the Spring demanded 64% of the Dean's time as opposed to extra-institutional activities which required 32% of Dean 4's time. Among the intra-institutional sub-categories of participants in Dean 4's activities, the greatest amount of time in the Spring was devoted to the Dean's subordinates who received 32% of her time in contrast to the 10% which they received in the Fall. During the Fall the intra-institutional sub-category which received the greatest amount of Dean 4's time was her administrative peer group which received 23% of her time as opposed to the 20% which they received in the Spring. Students occupied approximately the same amount of the Dean's time in both the Spring and the Fall observation periods (9% and 10% respectively). No time was spent with administrative superordinates during the Spring and only 6% of Dean 4's Fall working hours were spent with her administrative superordinates. Among the categories which represent extra-institutional contacts the greatest amount of time in both the Spring and Fall observations was spent with representatives of other institutions (30% and 9% respectively). Only 2% of Dean 4's time in the Spring was occupied by contact with government representatives and none of her time was used in this manner during the Fall. No time was spent during either period of observation with representatives of other institutions

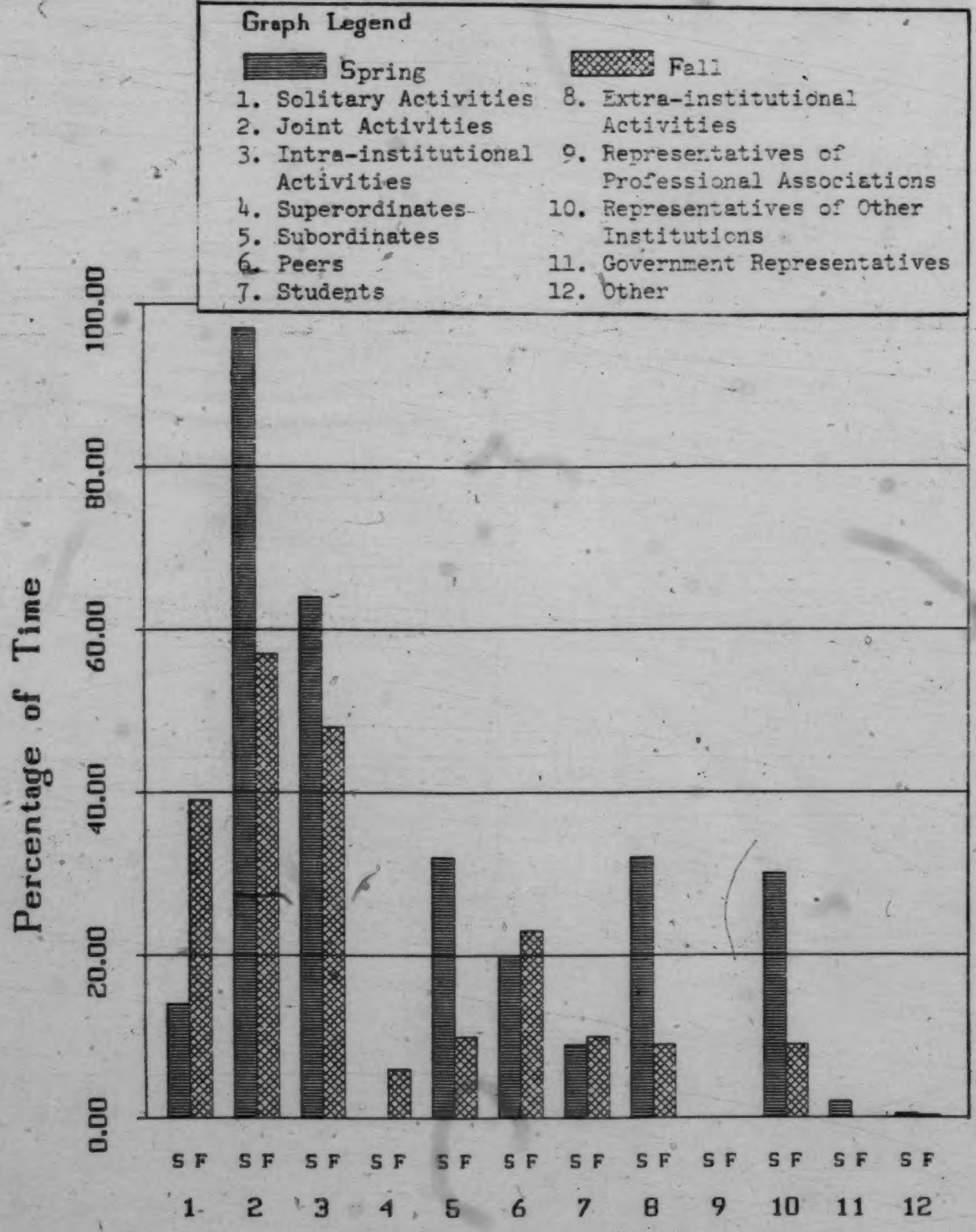


Figure 24 Dean 4 Participants by Time

and only 0.5% and 0.3% of Dean 4's time was spent in interactions with people who were outside the operational definitions for the preceding categories.

Dean 5. Figure 25 presents a graphic illustration of the manner in which Dean 5's time was distributed among the various categories of participants. The percentage of time spent on joint activities, in both the Spring and the Fall observations, was larger than the percentage of time spent on solitary activities. Likewise, time spent in intra-institutional interactions was greater than that spent in extra-institutional interactions during both observational periods. Dean 5 spent the greatest amount of her time, in both Spring and Fall (32% and 36% respectively) with her administrative subordinates. Students received 18% of Dean 5's time during the Spring and 6% of her time during the Fall. Administrative superordinates and peers occupied so little of Dean 5's time during the Spring (0.1% and .05% respectively) and during the Fall (0.1% and 0.5% respectively) that they fail to show on the graph. No contact was experienced with representatives of either professional associations or the government during the two observation periods. Interactions with individuals who did not conform to the operational definitions established for the preceding categories occupied 2% of Dean 5's working time during the Spring and 1% during the Fall.

Distribution of the Deans' Time by Individual Category of Participant

Solitary Activities. Data related to the time spent by each of the deans in solitary activities are summarized in Table 14. The number

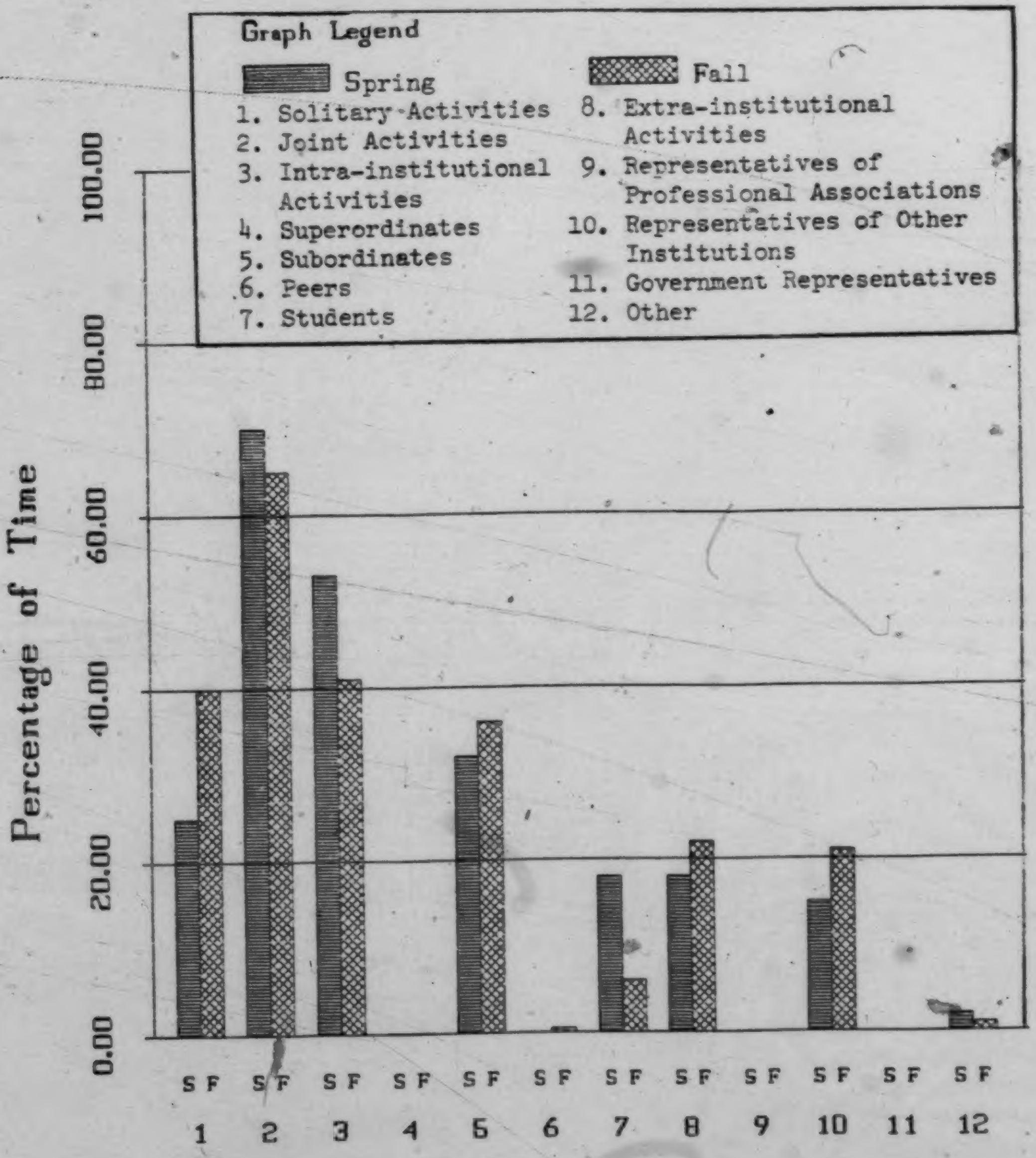


Figure 25 Dean 5 Participants by Time

Table 14

Summary of Time Spent on Solitary Activities

	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of solitary activities	37	63	100	34	30	64	41			26	29	55	44	51	95
Average number per day	12.3	21	16.6	11.3	10	10.6	13.6			8.6	9.6	9.1	14.7	17	15.8
Time* spent on solitary activities	275	564	839	309	368	677	586			234	881	1115	317	547	864
Average duration of each solitary activity	7.4	8.9	8.1	9.1	12.2	10.6	14.3			9	30.3	19.6	7.2	10.7	8.7

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observation data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

of times that the deans were engaged in solitary activities during the Spring ranged from 26 to 44 and from 29 to 63 in the Fall. The deans averaged between 8.6 and 14.7 periods of solitary activity during the Spring and during the Fall they averaged betwen 9.6 and 21.0 periods of solitary activity. The range of time which the deans devoted to solitary activity during the Spring observations varied from 234 minutes to 586 minutes. The Fall range of time for this activity was between 368 minutes and 881 minutes. During the Spring the average duration of each period of solitary activity varied from 7.2 minutes to 14.3 minutes. In Figure 26, the percentage of time which each of the deans devoted to solitary activity during the two observation periods is compared. Each dean's cumulative percentage for the two periods is also shown. The graph illustrates the fact that the deans spent more time at solitary activities during the Fall (32.3%) than they did during the Spring (21.4%) with the cumulative mean being 27.9%. In all individual cases for which there is a complete set of data the deans spent more time on solitary activities in the Fall than they did in the Spring. During the Spring, Dean 3 spent the greatest percentage of time (38.7%) on solitary activities of all the deans. Dean 4 spent the least amount of time (13.7%) of all the deans on solitary activities. Deans 1, 2, and 5 spent 16.8%, 18.2%, and 24.5% of their time respectively on solitary activities during the Spring observation period. In the Fall the largest percentage of time spent on solitary activities was 40.2% (Dean 5). Dean 4 followed closely with 38.8% of her Fall working hours spent in solitary activities. Dean 1 was occupied with solitary activities for 29.8% of her time during the Fall. The lowest percentage of time spent on solitary activities during the Fall was 20.6% (Dean 2).

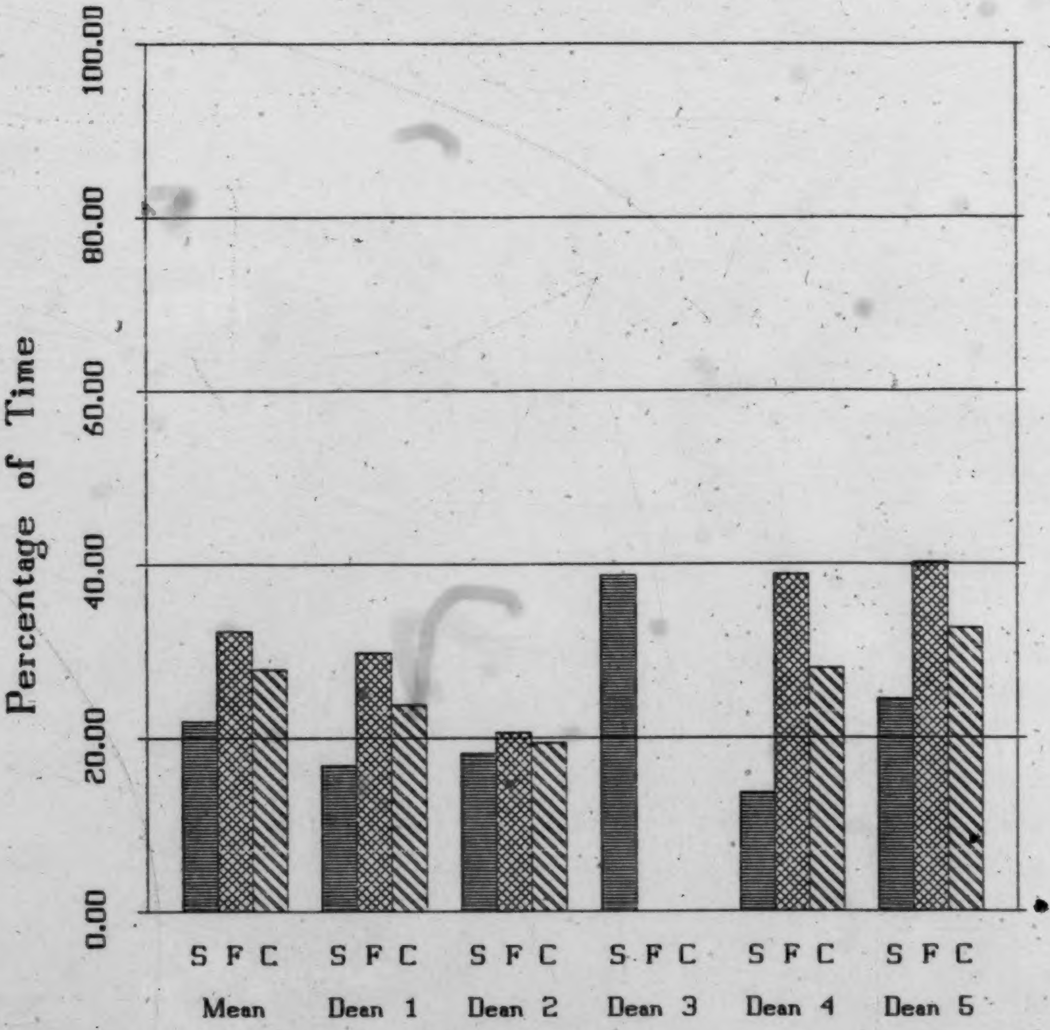


Figure 26 Solitary Activities by Time

Graph Legend

▤ S
▦ F
▧ C

Joint Activities. As shown in Table 15, the number of the deans' activities which involved other participants ranged from 31 to 56 in the Spring and from 35 to 52 in the Fall. The deans averaged between 10.3 and 18.6 joint activities per day during the Spring. In the Fall observation period, the range for the average number of joint activities per day varied between 11.6 and 17.3. The amount of time spent on joint activities in the Spring varied from a high of 1791 minutes to a low of 911 minutes. In the Fall the highest amount of time spent in joint activities was 1399 minutes; the least amount of time spent in joint activities was 888. The longest average duration of a joint activity in the Spring was 34.4 minutes; the shortest was 18.2 minutes. The Fall average duration for joint activities varied from 19.3 to 36.8 minutes. Figure 27 represents the percentages of time spent by the deans on joint activities. The mean amount of time allocated to joint activities by the deans was 80% in the Spring and 67% in the Fall with a cumulative mean over both periods of 73%. The graph shows that the greatest percentage of time spent on joint activities during the Spring was 97% (Dean 4) followed closely by Dean 2's 92%. Deans 1, 3, and 5 utilized 72%, 69%, and 70% respectively of their time on joint activities during the Spring. In the Fall, the percentages of time spent on joint activities declined in three cases (Deans 2, 4, and 5) to 74%, 57%, and 65%, respectively, as opposed to the Spring observations. Dean 1's joint activities increased modestly to 74% in the Fall.

Intra-Institutional Participants. In Table 16 the summary of time spent by the deans in activities involving intra-institutional participants is shown. This category was comprised of the

Table 15

Summary of Time Spent on Joint Activities

	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of joint activities	56	52	108	56	39	95	31			48	35	83	50	46	96
Average number per day	18.6	17.3	18	18.6	13	31	10.3			16	11.6	27.6	16.6	15.3	16
Time* spent on joint activities	1178	1399	2576	1791	1315	3106	995			1652	1291	2942	911	888	1799
Average duration of each joint activity	21	26.9	23.9	32	33.7	32.9	32.1			34.4	36.8	35.5	18.2	19.3	18.7

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observation data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

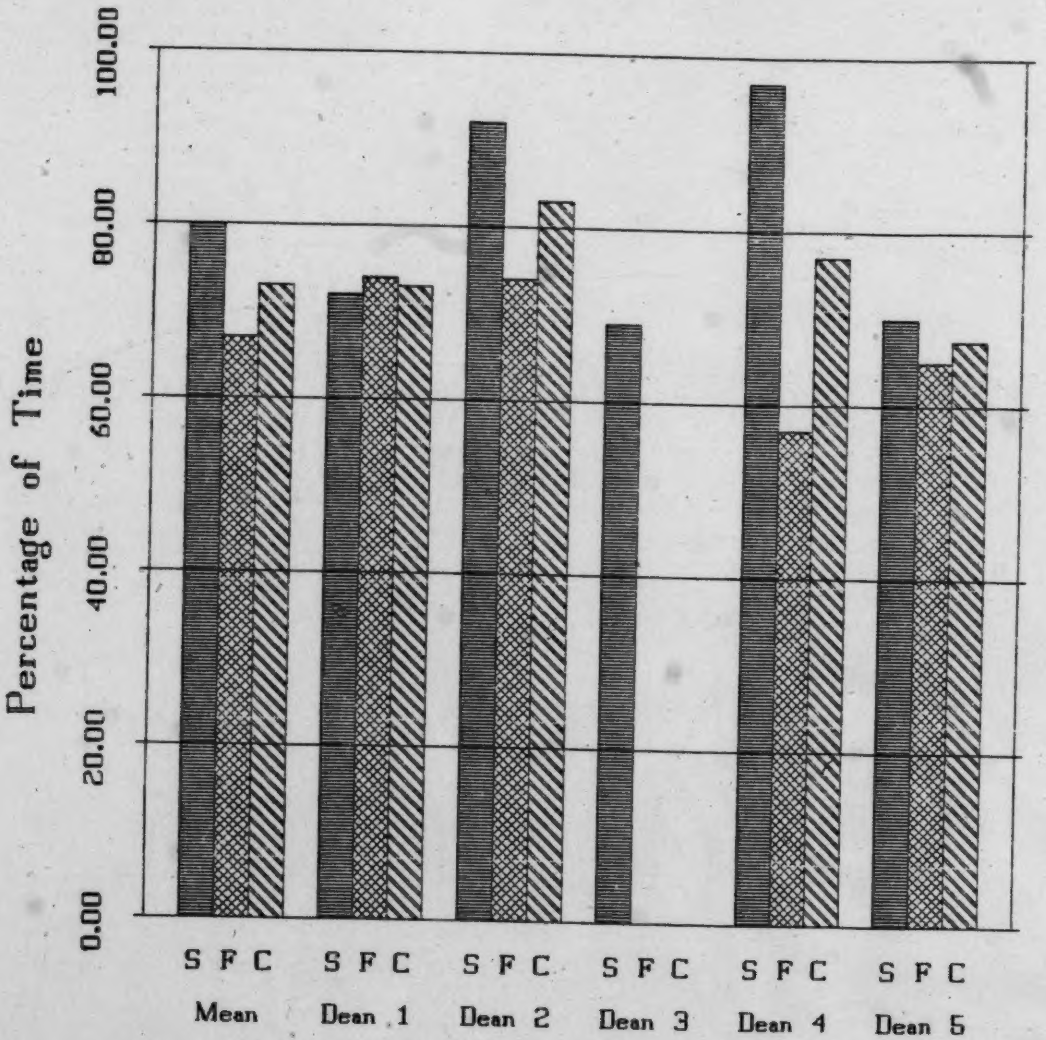


Figure 27 Joint Activities by Time

Table 16

Summary of Time Spent with Intra-institutional Participants

	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of encounters with intra-institutional participants	40	41	81	52	34	86	20			36	28	64	37	36	73
Average number of intra-institutional encounters per day	13.3	13.6	13.4	17.3	11.3	14.3	6.6			12	9.3	21.3	12.3	12	12.1
Time* spent in intra-institutional encounters	754	1015	1769	1331	874	2205	553			1097	1086	2183	682	562	1244
Average duration of intra-institutional encounters	18.9	24.7	21.8	25.5	25.7	25.6	27.6			30.5	38.8	34.7	18.4	15.6	17

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observation data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

sub-categories of administrative superordinates, administrative subordinates, administrative peers, and students each of which will be discussed separately in the following paragraphs. The purpose in this paragraph is to consider collectively those activities in which the deans were involved with intra-institutional participants. The Spring range for the number of encounters with intra-institutional participants was between 20 and 52 while the Fall range was between 34 and 41. The deans had averages for the number of intra-institutional encounters per day ranging from 6.6 to 17.3 during the Spring and from 9.3 to 13.6 during the Fall. The total amount of time devoted to these intra-institutional encounters in the Spring observations was from 682 minutes to 1331 minutes and in the Fall from 562 minutes to 1086 minutes. During the Spring, the highest average duration of these encounters was 30.5 minutes and the lowest average duration was 18.9 minutes. The highest average duration for encounters with intra-institutional participants in the Fall was 38.8 minutes and the lowest average duration was 15.6 minutes. As Figure 28 shows, the mean percentage of time spent on intra-institutional encounters by all the deans during the Spring was 54% and during the Fall it was 48% with a combined mean over the two periods of 51%. Dean 2 spent the greatest amount of time (68%) on interactions with intra-institutional participants during the Spring observations followed closely by Dean 4 who spent 64% of her Spring working hours on this activity. Dean 5 was occupied in this fashion for 53% of her time during the Spring. Intra-institutional encounters required 46% of Dean 1's time and 37% of Dean 3's time. In the Fall Deans 2, 4, and 5 all reduced their time commitment in this area to 49%

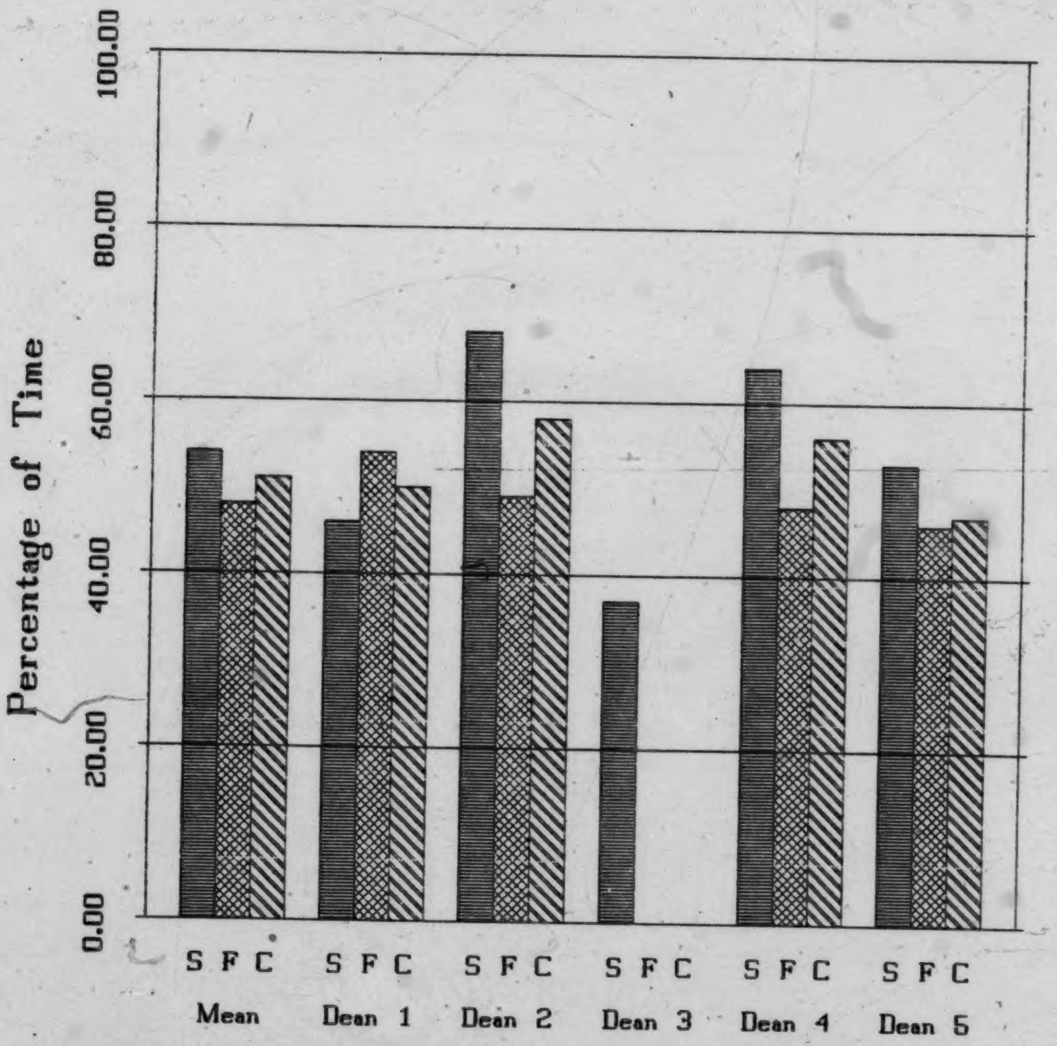
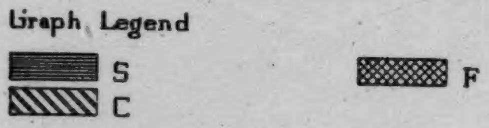


Figure 28 Intra-Institutional Contacts by Time



48%, and 41% respectively, while Dean 1 increased hers to 54%.

Superordinates. Table 17 shows that all deans for whom there is a complete set of data spent at least some time on interactions with their superordinates during the two observation periods; however, the amount of time involved was minimal. During the Spring three of the deans had no contact with their superordinates and the other two had only one contact each with theirs. In the Fall all of the deans observed had contact with their superordinates; three had 1 contact each and the fourth had three contacts. During the Spring, those deans who had contact with their superordinates all averaged 0.3 contacts per day. The Fall observations revealed an average number of daily contacts of either 0.3 or 1. The time spent with superordinates in the Spring was 35 minutes for one subject and 2 minutes for the other. During the Fall the time spent in this fashion ranged from 2 minutes to 240 minutes. The two deans who had Spring encounters with their superordinates had average durations for their interactions of 35 minutes and 2 minutes. In the Fall the average durations of encounters with superordinates ranged from 2 minutes to 240 minutes. As Figure 29 illustrates, the Spring mean for percentage of time spent in contact with superordinates by all of the deans was 0.5% while the Fall mean was 7% and the combined mean over both periods of observation was 4%. Dean 2 spent 2% of her time in the Spring with her superordinates and Dean 5 spent 0.1% (an amount too small to register on the graph). In the Fall, Dean 5 maintained the same percentage as in the Spring. The other three deans (Deans 1, 2, and 4) all increased the percentage of time which they spent with their superordinates to 8%, 13%, and 6% respectively.

Table 17

Summary of Time Spent with Superordinates

	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of interactions with superordinates	0	3	3	1	1	2	0			0	1	1	1	1	2
Average number of interactions per day	0	1	0.5	0.3	0.3	0.3	0			0	0.3	0.15	0.3	0.3	0.3
Time* spent in interactions with superordinates	0	160	160	35	240	275	0			0	129	129	2	2	4
Average duration of interactions with superordinates	0	53.3	53.3	35	240	137.5	0			0	129	129	2	2	2

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observation data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

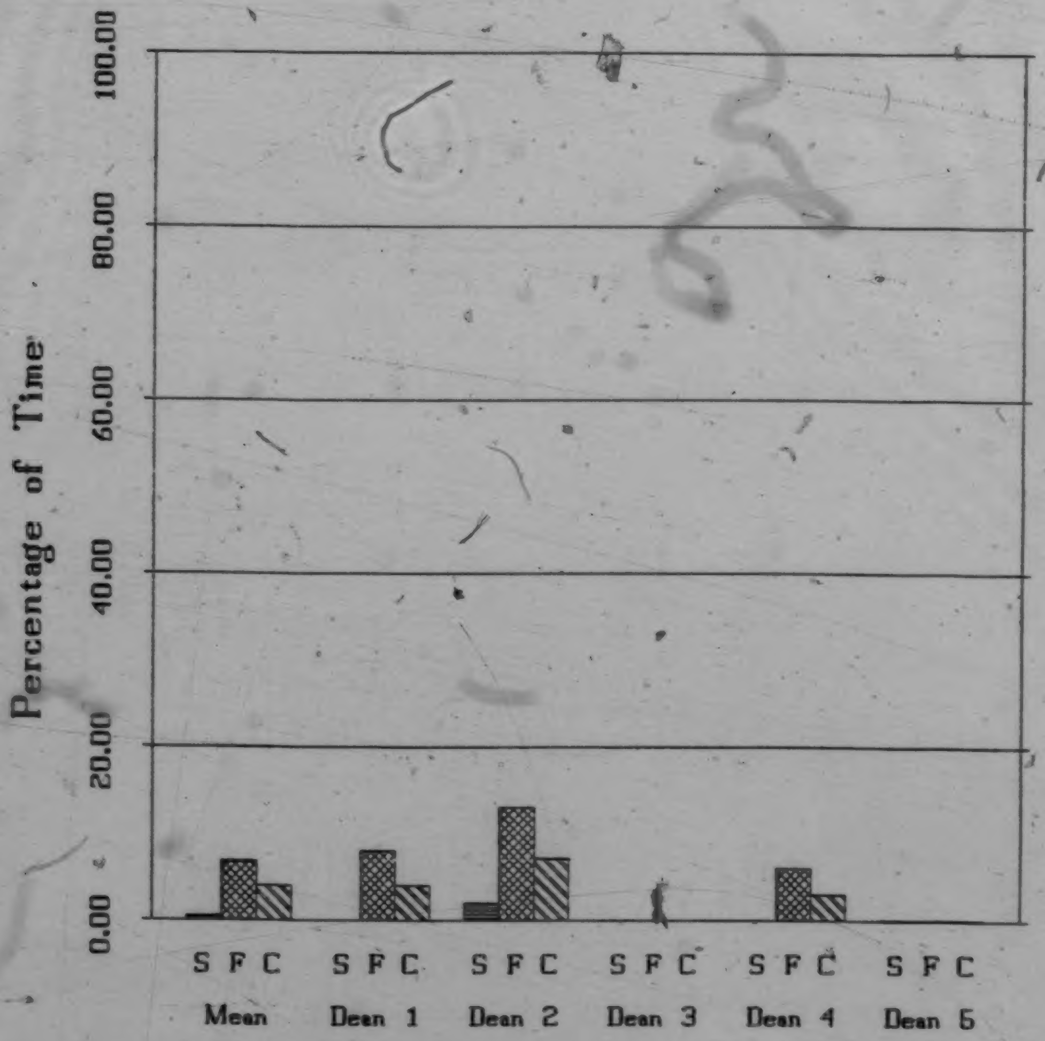


Figure 29 Superordinates by Time

Graph Legend

▤ S
▩ F
▧ C

Subordinates. Table 18 summarizes the data related to the deans' interactions with subordinates. The highest number of interactions during the Spring was 44 and the lowest number was 6. During the Fall observation period the number of interactions with subordinates varied between 14 and 32. The Spring range for the average number of interactions per day was from 2 to 14.6 while the Fall range was 4.6 to 10.6. The amount of time that the individual deans spent with their subordinates was between 79 minutes and 1220 minutes for the Spring and between 211 minutes and 492 minutes in the Fall. The average duration of each encounter with subordinates varied from 9.1 minutes to 27.7 minutes in the Spring and from 10.7 minutes to 16.5 minutes in the Fall. Figure 30 presents percentages of time spent by each of the deans with subordinates during the Spring and Fall observational periods and a cumulative percentage over the two periods combined for comparative purposes. The mean time spent by all the deans with their subordinates during the Spring was 30%, whereas the Fall mean was 19% and the cumulative mean over both periods was 25%. Dean 2 spent the greatest portion of time (62%) with administrative subordinates during the Spring. Deans 4 and 5 each utilized the same percentage (32%) of time in this manner. Deans 1 and 3 spent 13% and 5% respectively, of their Spring working hours in encounters with subordinates. During the Fall, 36% of Dean 5's time was devoted to her subordinates. Dean 1 required 23% of her Fall working hours for interactions with her subordinates. During the Fall, 15% of Dean 2's time and 10% of Dean 4's time were used in contact with their subordinates.

Table 18

Summary of Time Spent with Subordinates

	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of interactions with subordinates	23	26	49	44	25	69	6			24	14	38	29	32	61
Average number of interactions per day	7.6	8.6	16.3	14.6	8.3	11.4	2			8	4.6	6.3	9.6	10.6	10.1
Time* spent in interactions with subordinates	210	430	639	1220	268	1488	79			540	211	751	417	492	909
Average duration of interactions with subordinates	9.1	16.5	12.8	27.7	10.7	19.2	13.1			22.5	15	18.8	14.4	15.3	14.9

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observation data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

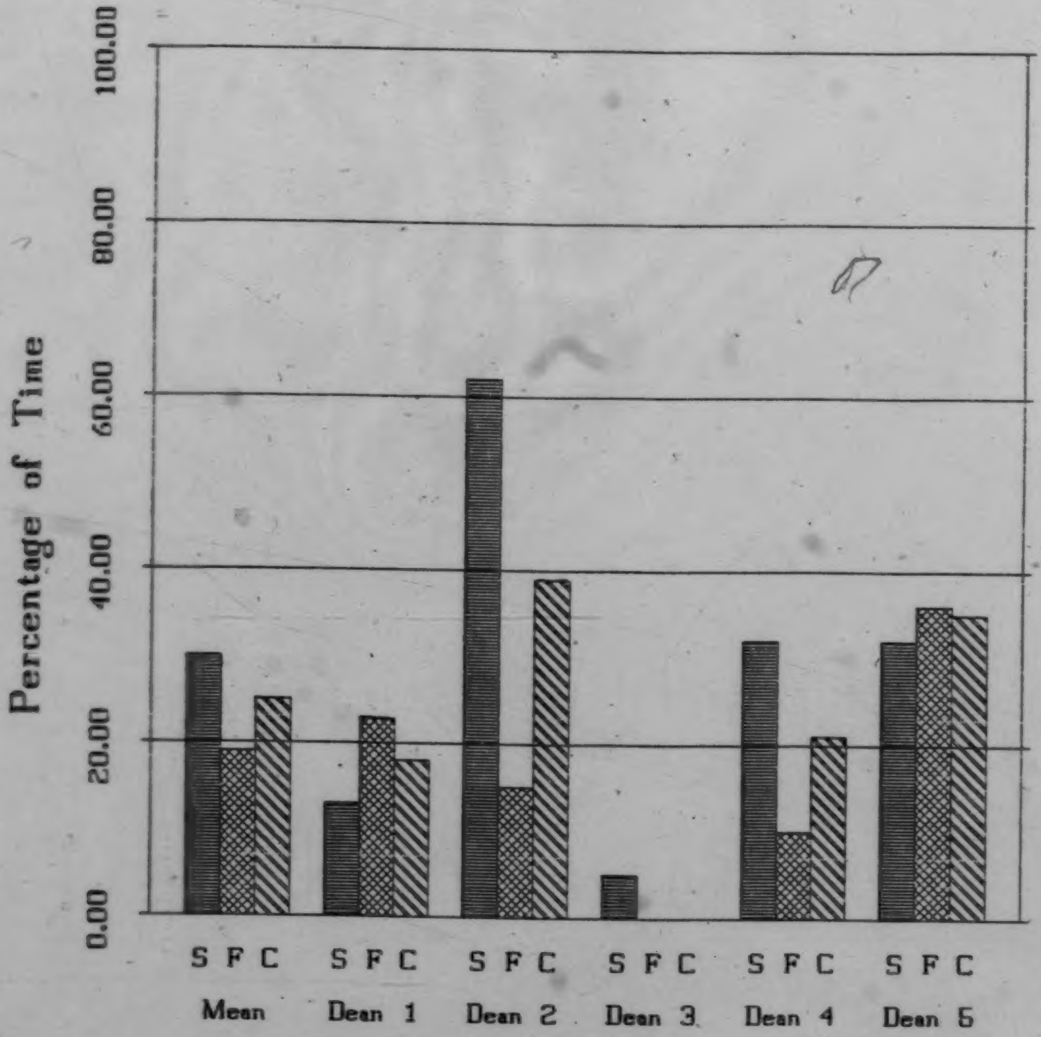


Figure 30 Subordinates by Time

Graph Legend

▤ S ▦ F

▧ C

Peers. All deans had some, albeit modest, amount of contact with those who conformed to the operational definition of peers as shown in Table 19. The greatest number of interactions with peers during the Spring was 12 and the lowest was 1. The number of Fall interactions with peers ranged from 1 to 10. The range among the deans for the average number of encounters per day during the Spring was 0.3 to 4 and during the Fall it was 0.3 to 2.6. The Spring observations showed a wide range from 1 minute to 435 minutes for the total amount of time spent by the deans with their administrative peers. Similarly, the Fall range for the total amount of time spent in this area was from 5 minutes to 511 minutes. As would be expected, on the basis of the foregoing statements, both the Spring and Fall observational periods also varied widely. The Spring average duration for peer interactions ranged from 1 minute to 43.5 minutes and the Fall range was 4 minutes to 51.1 minutes. Figure 31 permits comparison among the deans as to the percentage of time spent on interactions with their peers. The mean percentage of interaction for the Spring observation period was 13% while the mean percentage was 10% for the Fall and the mean over the two periods combined was 11.5%. The greatest amount of time spent with peers during the Spring was 27% (Dean 1); the least amount of time was 0.05% (Dean 5), an amount too small to show on the graph. Deans 2, 3, and 4 were observed to spend 4%, 22%, and 20% resspectively of their Spring working hours with their peers. The lowest Fall percentage of time spent with peers was Dean 5 with 0.5%, again an amount too small to be perceptible on the graph. Deans 1 and 2 both decreased the amount of time they spent with their peers to 9% for the former and 0.2% for the latter during the Fall.

Table 19

Summary of Time Spent with Peers'

	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of interactions with peers	10	8	18	5	1	6	12			10	10	20	1	2	3
Average number of interactions per day	3.3	2.6	3	1.6	0.3	2	4			3.3	3.3	3.3	0.3	0.66	0.5
Time* spent in interactions with peers	435	177	611	68	5	73	334			340	511	851	1	8	9
Average duration of interactions with peers	43.5	22.1	32.8	13.6	5	9.3	27.8			34	51.1	42.5	1	4	3

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observation data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

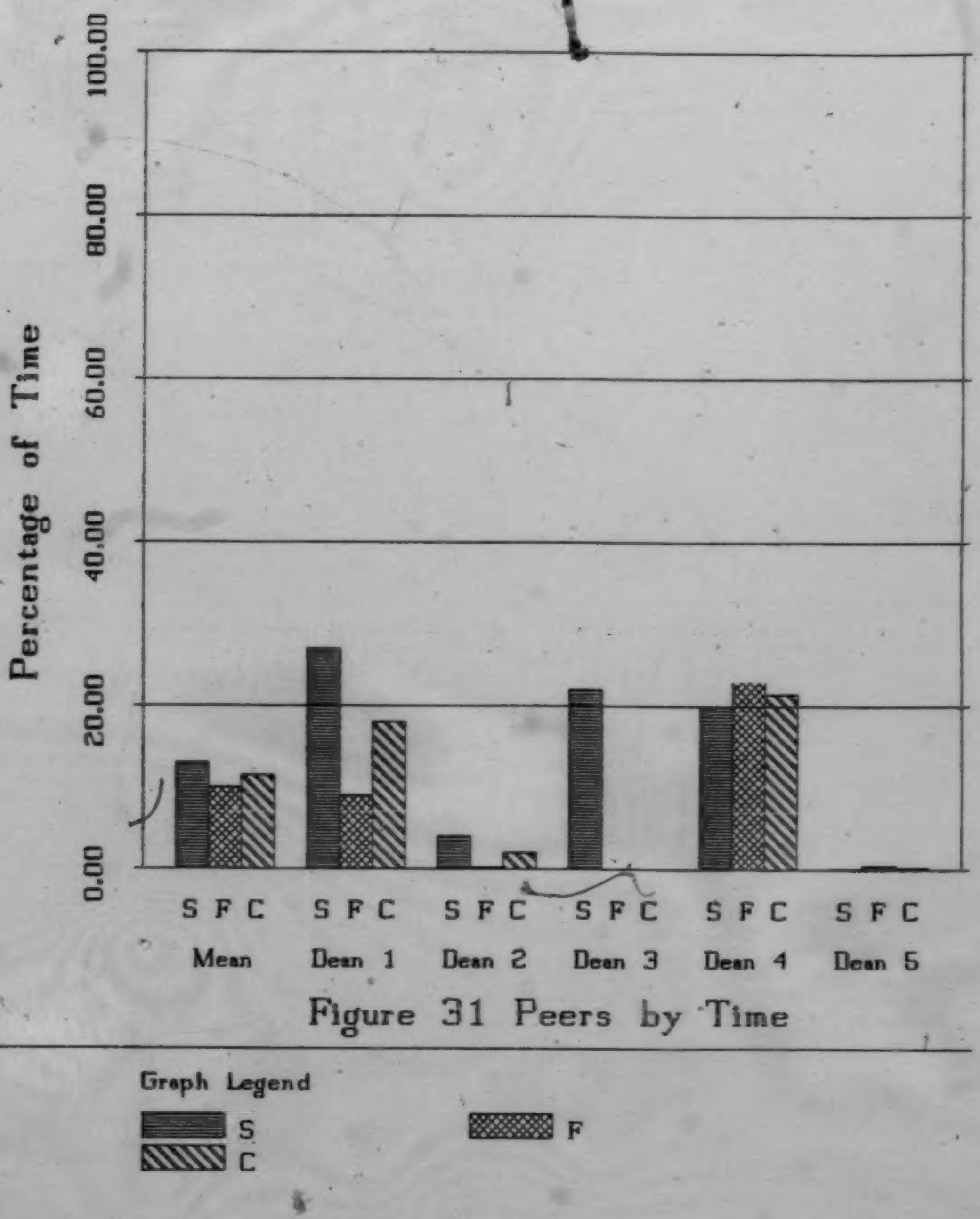


Figure 31 Peers by Time

Students. Table 20 shows that the range for interactions between the deans and their students was from 2 to 7 in the Spring and from 1 to 7 in the Fall. Daily student interactions averaged in the range between 0.6 and 2.6 during the Spring and between 0.3 and 2.3 in the Fall observation period. Time spent by the deans in interactions with students during the Spring varied widely from 8 minutes to 231 minutes and during the Fall from 75 minutes to 344 minutes. Correspondingly, the average duration of each student interaction during the Spring ranged from 4 minutes to 78.5 minutes and during the Fall from 49.1 minutes to 78 minutes. Figure 32 provides a graphic comparison of the percentage of time that the deans spent with students. The mean percentage of time during the Spring that the deans spent with students was 8% whereas the Fall mean time for the same group of participants was 12% with the mean time over the combined observational periods of 10%. Dean 1 spent 7% of her time during the Spring with students and 13% of her time during the Fall. During the Spring, Dean 2 spent 0.5% of her time with the students and during the Fall she spent 19% of her time with them. For Dean 3, only Spring data is available and during that time she spent 9% of her time with students. Dean 4 spent 9% and 10% of her time with students during the Spring and Fall, respectively. Students required 18% of Dean 5's time during the Spring and 6% during the Fall.

Extra-institutional Participants. The summary of the amount of time that the deans spent in encounters with extra-institutional participants is found in Table 21. Extra-institutional participants were subdivided into the categories of representatives of professional

Table 20

Summary of Time Spent with Students

	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of interactions with students	7	4	11	2	7	9	2			2	3	5	5	1	6
Average number of interactions with students per day	2.3	1.3	1.8	0.6	2.3	1.5	0.6			0.6	1	0.8	2.6	0.3	1.5
Time* spent in interactions with students	110	248	358	8	344	352	140			149	234	383	231	75	306
Average duration of interactions with students	15.7	62	38.9	4	49.1	26.55	70			78.5	78	78.3	46.2	75	58.6

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observation data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

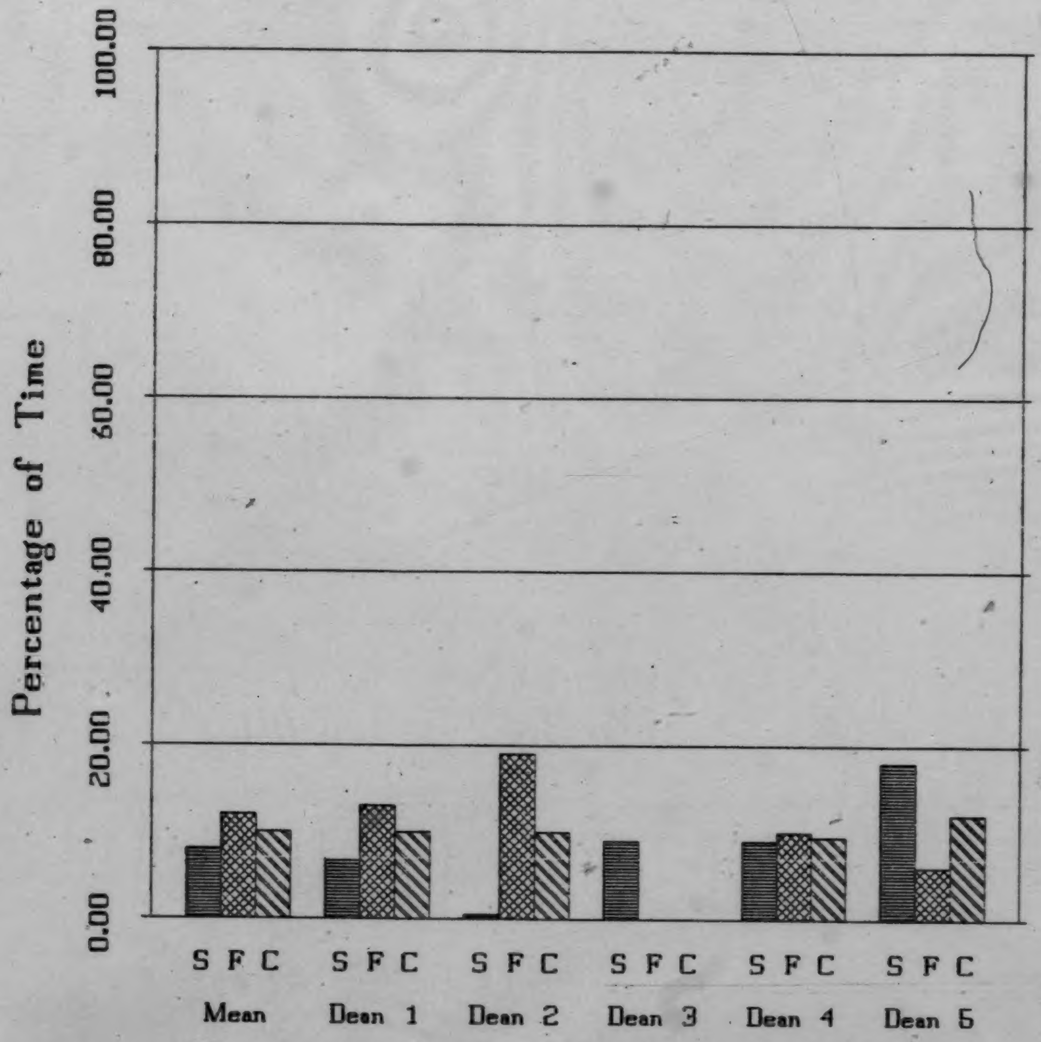


Figure 32 Students by Time

Graph Legend

▤ S

▩ F

▧ C

Table 21

Summary of Time Spent with Extra-institutional Participants

	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of encounters with extra-institutional participants	16	11	27	4	5	9	11			12	7	19	13	9	22
Average number of extra-institutional encounters per day	5.3	3.6	9	1.3	1.6	1.5	2.6			4	2.3	3.2	4.3	3	3.7
Time* spent in extra-institutional encounters	444	384	827	461	458	919	443			553	205	759	229	294	523
Average duration of extra-institutional encounters	27.8	34.9	30.6	115.3	91.6	103.5	40.3			46	29.3	37.7	17.6	32.6	25.1

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observation data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

associations, other institutions, and government as well as a category labelled "other". These sub-categories will be discussed in the following four paragraphs. The purpose here is to discuss them collectively. The number of encounters with extra-institutional participants ranged from 4 to 16 in the Spring and from 5 to 11 in the Fall. The resulting average number of encounters per day was between 1.3 and 5.3 in the Spring and between 1.6 and 3.6 in the Fall. The highest amount of time spent in this fashion was 553 minutes in the Spring and 458 minutes in the Fall. The lowest times were 229 minutes for the former and 205 minutes for the latter. The daily average of time spent in this type of encounter varied from 17.6 minutes to 115.3 minutes in the Spring and from 29.3 minutes to 91.6 minutes in the Fall. Figure 33 permits comparison of the percentage of time spent by the deans in extra-institutional encounters. The mean percentage of time utilized in this fashion in the Spring was 26% while the Fall percentage dropped to 18% and the mean percentage over both time periods combined was 22%. During the Spring observation period, Dean 1 devoted 27% of her working time to encounters with extra-institutional participants. This figure declined slightly to 20% during the Fall. Dean 2's percentages of time for extra-institutional participants were very close to each other for both Spring and Fall (24% and 26% respectively). Dean 3 spent 29% of her time during the Spring, the only period for which data are available. Dean 4 was involved in activities with extra-institutional participants for 32% of her time during the Spring but for only 9% of her time during the Fall. The Spring encounters with extra-institutional participants required 18% of Dean 5's time but the Fall required 22% of her working hours.

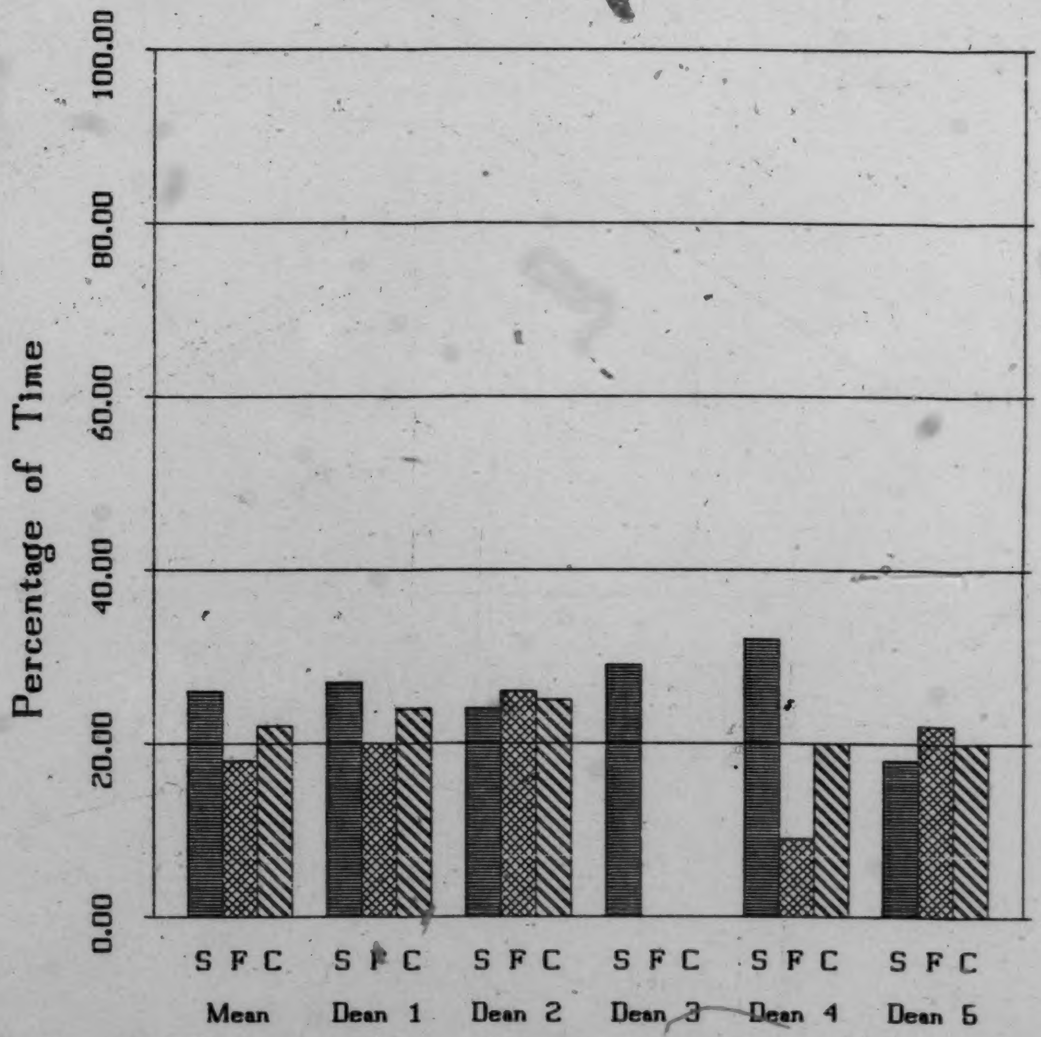


Figure 33 Extra-Institutional Contacts by Time

Graph Legend

▤ S ▩ F
▧ C

Representatives of Professional Associations. As shown on Table 22 the only one of the deans who was observed to have any contact with a professional association during either visit was Dean 1 who had 3 contacts with professional associations during the Spring and 7 contacts during the Fall. These contacts resulted in a daily average of 1 contact per day in the Spring and 2.3 contacts per day during the Fall. The total time which Dean 1 spent in contact with representatives of a professional association was 220 minutes in the Spring and 282 minutes in the Fall. The average Spring duration of these encounters was 73.3 minutes and the average Fall duration was 40.3 minutes. Figure 34 demonstrates that Dean 1 spent 14% of her Spring working time with representatives of professional associations and 15% of her Fall working time with a combined percentage over the two periods of 14.5%.

Representatives of Other Institutions. Table 23 shows that all of the deans had contact with representatives of other institutions during both observation periods. The number of such encounters ranged from 4 to 9 during the Spring observation period and from 4 to 8 during the Fall. The average daily number of encounters with representatives of other institutions varied between 1.3 and 3 in the Spring and between 1.3 and 2.6 for the Fall. The range for the total time spent in these encounters was 136 minutes to 506 minutes in the Spring and 102 minutes to 458 minutes in the Fall. The resulting average durations for encounters with representatives of other institutions were between 17 minutes and 115.3 minutes in the Spring and between 25.5 minutes and 91.6 minutes in the Fall. Figure 35 offers an illustrative comparison of the percentages of time that the deans spent in interactions with

Table 22

Summary of Time Spent with Representatives of Professional Associations

	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of encounters with representatives of professional associations	3	7	10	0	0	0	0			0	0	0	0	0	0
Average number of encounters per day with reps. of prof. associations	1	2.3	2.3												
Time* spent in encounters with reps. of prof. associations	220	282	502												
Average duration of encounters with reps. of prof. assocations	73.3	40.3	56.8												

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observation data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

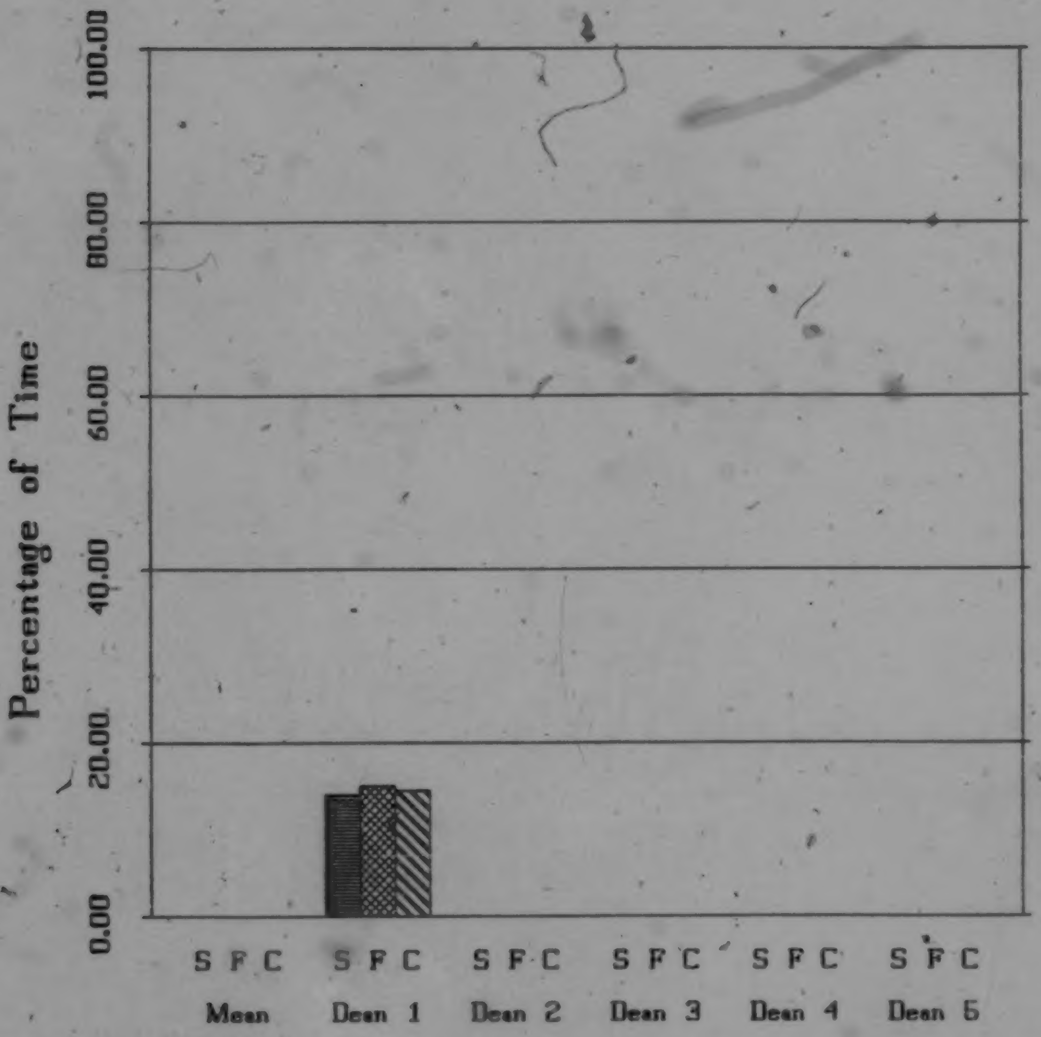


Figure 34 Professional Associations by Time

Graph Legend

▤ S

▩ F

▧ C

Table 23

Summary of Time Spent with Representatives of Other Institutions

	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of encounters with representatives of other institutions	8	4	12	4	5	9	6			9	6	15	9	8	17
Average number of encounters per day with reps. of other institutions	2.6	1.3	2	1.3	1.6	1.5	2			3	2	2.5	3	2.6	2.8
Time* spent in encounters with representatives of other institutions	136	102	238	461	458	919	426			506	198	704	198	292	490
Average duration of encounters with reps. of other institutions	17	25.5	21.3	115.3	91.6	103.4	71			56.2	33	44.6	21.4	36.5	29

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observation data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

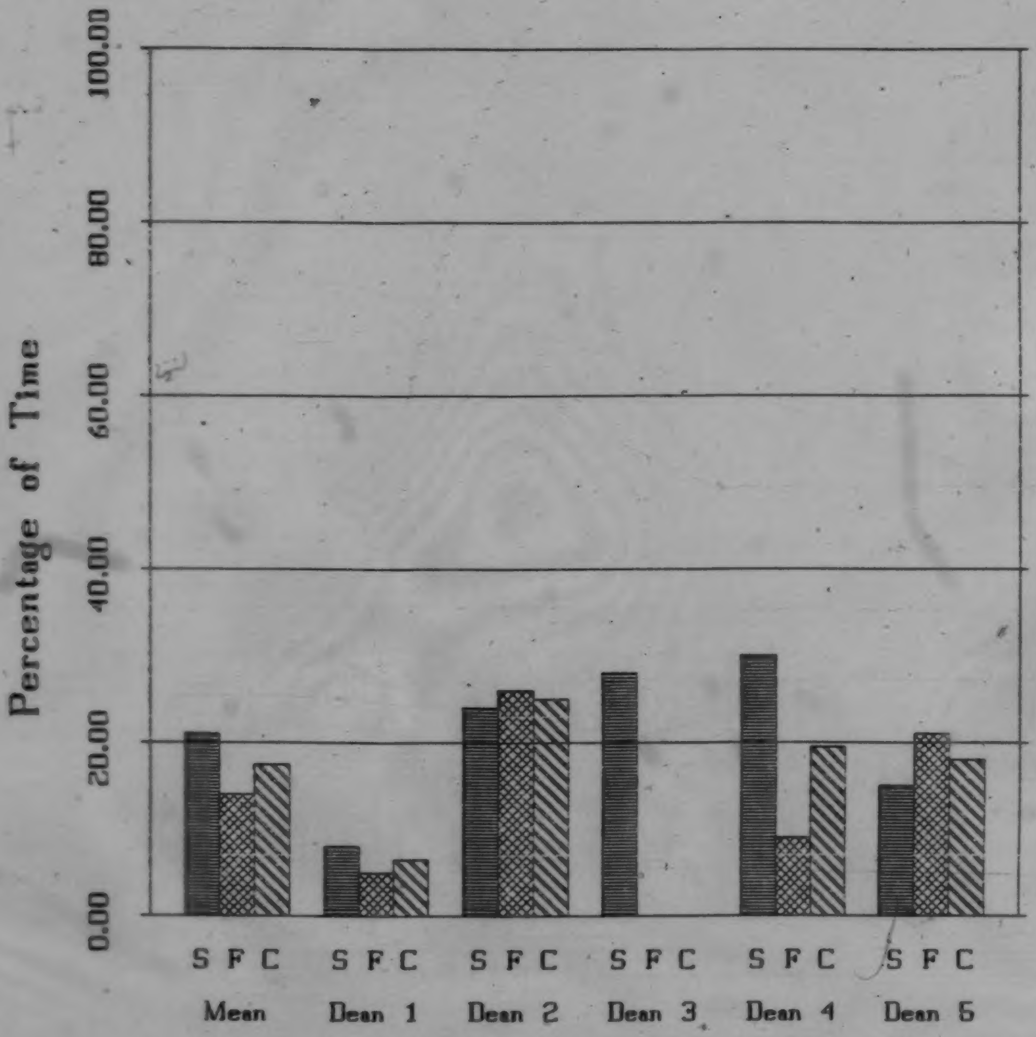


Figure 35 Other Institutions by Time

Graph Legend

▤ S ▩ F

▨ C

representatives of other institutions. The mean Spring percentage of time spent in this manner was 21%; the Fall mean was 14% and the cumulative mean over the two periods was 17.5%. Dean 1 spent 8% of her time during the Spring in encounters of this sort and 5% of her Fall time. Dean 2 spent 24% and 26% of the time during the Spring and Fall, respectively, in interactions with representatives of other institutions. Dean 3, for whom only Spring data are available, devoted 28% of her working time during the Spring to this type of participant. Encounters of this type required 30% of Dean 4's time in the Spring but only 9% of her time in the Fall. Dean 5 spent 15% and 21% of her time in interactions with representatives of other institutions during the Spring and Fall, respectively.

Government Representatives. Only Dean 4, as Table 24 shows, had contact during the observational periods with representatives of government. This single Spring encounter required 36 minutes or 2% of the Dean's time.

Other. As operationally defined, this category was reserved for those extra-institutional participants in the deans' activities who did not conform to the operational definitions established for the other sub-categories which were considered above. Table 25 shows that only Dean 2 had no encounters of this type. Dean 1 had 3 encounters during the Spring and none in the Fall. The greatest number of encounters observed in this category in the Spring was 5 followed by numbers of 4 and 1. The range for average daily encounters in the Spring was 0.3 to 1.6 and in the Fall it was 0.3 to 0.6. The time spent with participants in this category ranged from 11 minutes to 31 minutes in the Spring. In

Table 24

Summary of Time Spent with Government Representatives

	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of encounters with government reps.	0	0	0	0	0	0	0			1	0	1	0	0	0
Average number of encounters per day with government representatives										0.3		0.15			
Time* spent in encounters with government reps.										36		36			
Average duration of encounters with government reps.										36		36			

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observation data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

Table 25

Summary of Time Spent with Those Not Otherwise Categorized

	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of encounters with those not otherwise categorized	3	0	3	0	0	0	5			1	1	2	4	2	6
Average number of encounters per day	1		0.5				1.6			0.3	0.3	0.3	1.3	0.6	2
Time* spent in encounters with those not otherwise categorized	20		20				17			11	7	18	31	20	51
Average duration of encounters with those not otherwise categorized	6.66		6.66				3.4			11	7	9	7.8	10	8.9

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observation data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

the Fall the times for the two deans who were observed to have such contacts were 7 minutes and 20 minutes. The average duration of Spring encounters of this nature varied between 3.4 minutes and 11 minutes. The Fall results were 7 minutes and 10 minutes. Figure 36 presents a graph showing the miniscule percentages of time in which the deans were involved with participants who were classified as "other". The Spring mean for this sub-category was 1% and the Fall mean was 0.4% resulting in a cumulative percentage of 0.7% over the two combined periods of observation. Dean 1 spent 2% of her time in the Spring with these participants and none of her Fall working hours with them. Dean 2 did not spend any time with this category of participant during either the Spring or the Fall. Dean 3, for whom only Spring data are available, spent 1% of her time in this fashion. Dean 4 was required to commit 0.5% and 0.3% of her time to this category during the Spring and Fall respectively. Dean 5 utilized 2% and 1% of her time in this way during the Spring and Fall respectively.

Classification of the Type of Participants in the Nursing Dean's Activities: A Composite

The purpose of this section is to provide a synthesis of the data presented in the preceding three sections. A composite of the types of participants involved in the Deans' activities is presented. Table 26 summarizes the means for the time spent by the subject deans with each of the categories of participants in the classification scheme which emerged from the data.

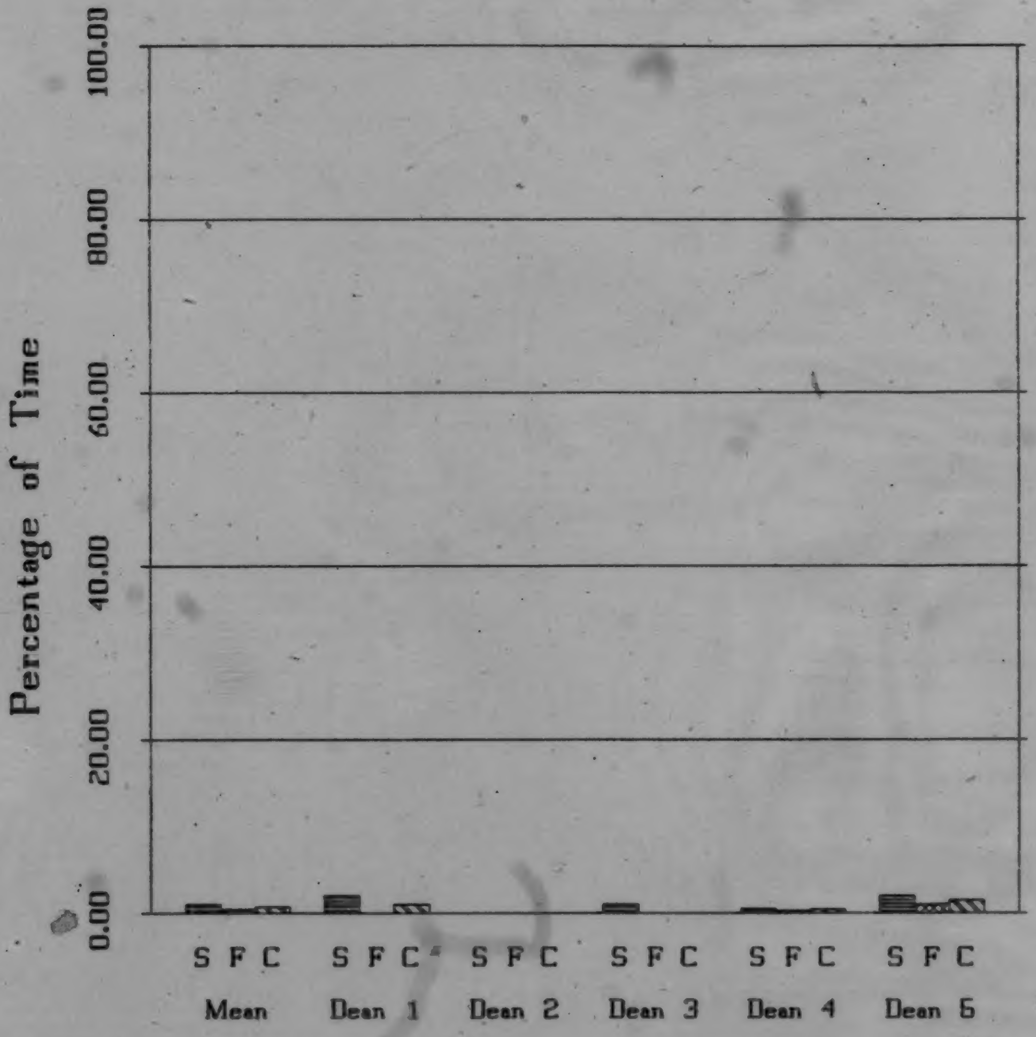


Figure 36 "Other" by Time

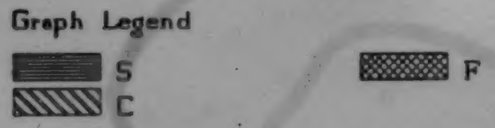


Table 26

Classification of the Deans' Activities by Participant
Mean Times* for Spring, Fall and Combined Observations

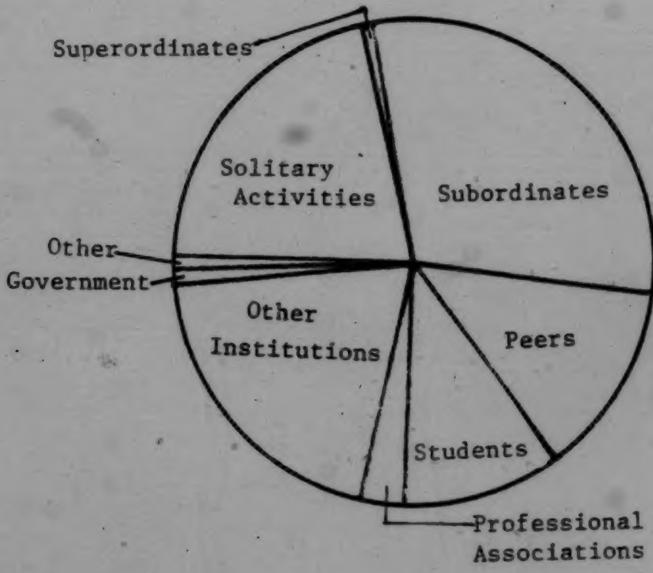
Type of Participant	Spring Mean (3 days)	Fall Mean (3 days)	Combined Mean
Solitary activities	344	590	934 (467)**
Joint activities	1305	1223	2528 (1264)
Intra-institutional participants	883	884	1767 (883.5)
Superordinates	7.4	133	140.4 (70.2)
Subordinates	493	350	843 (421.5)
Peers	215	175	380 (195)
Students	128	225	353 (176.5)
Extra-institutional participants	426	335	761 (552.5)
Professional Associations	44	70	114 (57)
Other Institutions	345	263	608 (13.95)
Government	7	0	7 (3.5)
Other	15.8	7	22.8 (11.4)

* All times are in minutes and are rounded to the nearest minute.

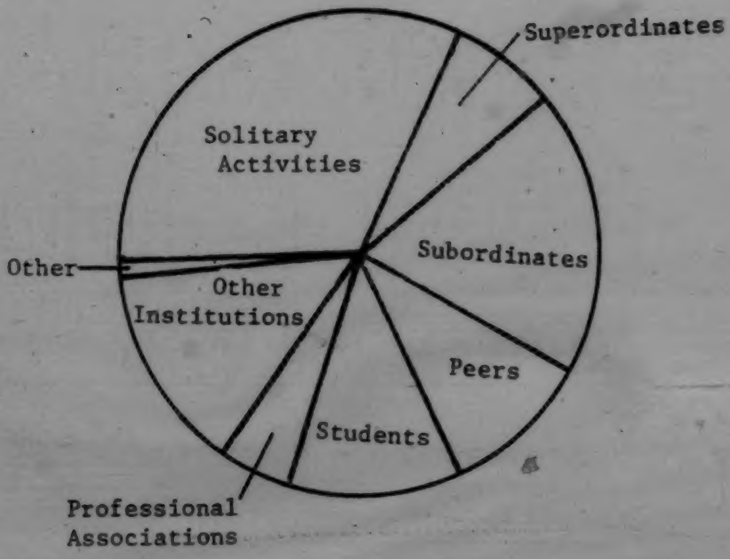
** Times in parentheses are the combined times over three days for comparison with the Spring and Fall.

As shown in Table 26, the five deans from the sample observed spent more time in the Fall on solitary activities than in the Spring and, conversely, a greater amount of time on joint activities during the Spring than in the Fall. Activities involving intra-institutional participants were quite constant during both Spring and Fall, while the greater amount of contact with extra-institutional participants in the Spring over the Fall accounted for most of the difference in the amount of joint activities between the two observational periods. As shown in Table 26, a greater amount of time in the Fall was spent with representatives of professional associations than was spent with this group in the Spring. Contact with representatives of other institutions was greater for the subject deans during the Spring. Government contacts occurred in the Spring rather than the Fall. Others who do not conform to the operational definitions developed for previous categories contacted the subjects in this study more in the Spring than in the Fall.

The percentages of time that the subject deans devoted to each of the categories in the classification during the Spring and the Fall are shown in Figure 37. During the Spring, the deans spent 21.4% of their time in solitary activities, while joint activities occupied the remainder of their time. Joint activities, when divided into intra-institutional and extra-institutional required 54% and 26% respectively of the subject deans' time. The sub-categories of intra-institutional participants, i.e., superordinates, subordinates, peers, and students, required 0.5%, 10%, 13%, and 8% respectively, of the subjects' time during the Spring. Representatives of the



SPRING



FALL

Figure 37

Proportions of the Nursing Deans' Time Spent on the Categories Within the Classification of Activities by Participants: Composite Summaries for Spring and Fall

professional associations occupied 3% of the deans' time during the Spring. As Figure 37 shows, representatives of other institutions constituted the majority of the subjects' extra-institutional contacts during the Spring because they occupied 21% of the deans' time. Contact with government representatives required 0.4% of the time of the subjects in this study, with others who did not conform to the three preceding categories requiring 1% of their time during the Spring. In the Fall, the population of deans studied distributed time slightly differently among the classification of participants in their activities. The percentage of time spent in solitary activities in the Fall was 32.3% while the remaining joint activities comprised 67% of the deans' time. Time devoted to the sub-categories within the joint activities category, i.e., intra-institutional and extra-institutional, during the Fall were 48% and 18% respectively. The percentages of time that the subject deans spent on the sub-categories which constitute intra-institutional participants are 7% of their time for superordinates, 19% for subordinates, 10% for peers, and 12% for students. The sub-categories within the extra-institutional participants received 3.5% of the deans' time for representatives of professional associations, 14% for representatives of other institutions, and 0.4% for those who were not otherwise classified.

The data from these two separate time periods, i.e., Spring and Fall, were combined and the results are provided in Figure 38. The deans of nursing, based on the sample studied, spent 27.9% of their time in solitary activities and 73% of their time in joint activities. Within the joint activities, intra-institutional activities required 51%

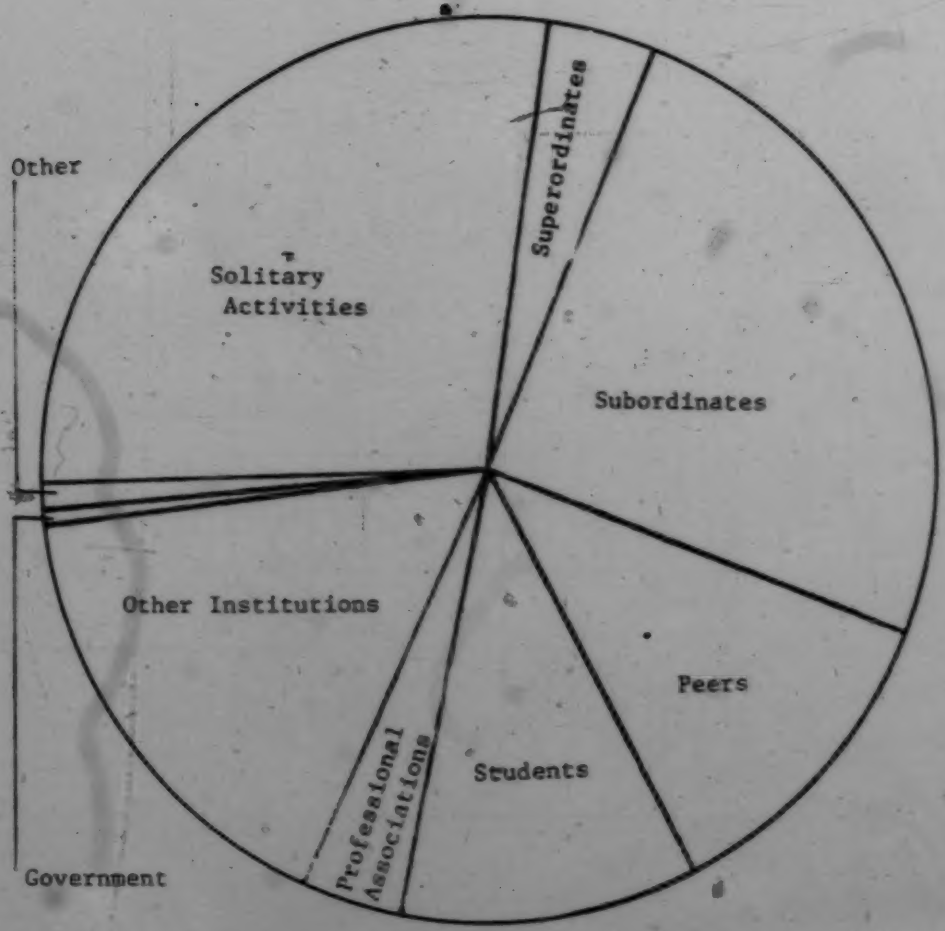


Figure 38

Proportions of the Nursing Deans' Time Spent on the Categories Within the Classification of Activities by Participants: An Aggregate of their time and extra-institutional activities required 22%. Among the intra-institutional participants, superordinates took 4% of the subjects' time, subordinates 25%, peers 11.5%, and students 10%. Within the extra-institutional participant group, representatives of professional associations received 3.5% of the dean's time, representatives of other institutions 17.5%, government representatives 0.2%, and others not previously classified 0.7% of her time.

Chapter 5

DATA ANALYSIS: PART II

The purpose of this chapter is to present the results of the analysis of the high inference level data, as defined in Chapter 3, related to the purpose for which an activity was performed. These data were generated by the structured observation of five Deans of Nursing at Canadian universities. The chapter is divided into four sections. The first section presents an overview of the data. The second section contains a report of the manner in which each of the individual deans distributed her time among the purposes for which activities were performed. A comparison of the amount of time which the deans devoted to each of the categories is found in the third section. The chapter concludes with a section which presents composite and aggregate summaries of the proportions of time that the five Deans of Nursing spent on each of the categories within the classification system.

Overview

As discussed in the data analysis section of Chapter 3, when behavioural units were arranged into groups of activities having similar purposes, thirteen categories falling into four clusters were identified. The first three clusters, comprising ten categories, were so similar to those identified by Mintzberg (1973:58-94) that his definitions were adapted for use in preparing the data for presentation in this chapter. The last cluster of three categories was unique to the data in this study and required initial definition before being used to prepare the data for consideration in this report. The operational definitions for all four clusters and thirteen categories can be found in Chapter 3 on pages 70 to 73.

Table 27 contains a summary of the deans' Spring activities by purpose for which the activities were performed. The amount of time related to each category of purpose is shown as well as means for the amount of time in all categories. During the Spring, the time which the deans devoted to interpersonal behaviours varied from 270 minutes to 853 minutes with a mean of 466 minutes. The figurehead category of behaviours, within this cluster of activities, required contact which varied from 65 minutes to 412 minutes. The mean for figurehead activities was 173 minutes. The range for leader behaviours during the Spring observation period was between 5 minutes and 412 minutes. Liaison behaviours required from 29 minutes to 279 minutes with a mean of 147 minutes. The informational behaviours constituted the second cluster within the classification system and required commitments from the deans which ranged from 201 minutes to 395 minutes with a mean of 307 minutes. Within this cluster, the monitor behaviours ranged from 156 minutes to 289 minutes; disseminator behaviours ranged from 24 minutes to 85 minutes; and spokesman behaviours ranged from 5 minutes to 52 minutes. The decisional behaviours, which made up the third cluster of behaviours required commitments from the deans which ranged from 165 minutes to 461 minutes. During the Spring, only two deans were observed

Table 27

Summary: Purpose of the Deans' Activities by the Time* Spent on Each
(Spring Observation Period)

Purpose	Dean					
	Mean	1	2	3	4	5
Interpersonal	466	541	853	270	335	329
Figurehead	173	189	412	119	65	79
Leader	154	74	412	5	34	206
Liaison	147	279	29	146	237	44
Informational	307	310	338	201	293	395
Monitor	230	234	235	156	217	289
Disseminator	53	24	82	40	33	85
Spokesman	27	52	21	5	36	21
Decisional	315	461	165	199	457	291
Entrepreneur	78	128	0	0	260	0
Disturbance Handler	89	6	48	62	59	272
Resource Allocator	111	293	117	47	81	15
Negotiator	39	32	0	90	57	14
Scholarship	350	377	390	507	320	154
Teacher	188	157	197	412	166	6
Researcher	130	140	112	95	154	148
Author	32	80	81	0	0	0

* All times are given in minutes and are rounded to the nearest minute.

to engage in activities which were classified as being entrepreneurial in purpose. The mean for entrepreneur behaviours during the Spring was 78 minutes. Disturbance handler behaviours ranged from 6 minutes to 272 minutes. The range presented for resource allocator behaviours was 15 minutes to 293 minutes. Four of the deans were observed to perform activities for which the purpose was to negotiate. The range for this category of activities extended from 14 minutes to 90 minutes. The fourth cluster of activities was comprised of those activities for which the dominant purpose was scholarly. These scholarship behaviours required commitments from the deans which ranged from 154 minutes to 507 minutes. During the Spring, the teacher behaviours within this cluster of activities varied from 6 minutes to 412 minutes. Behaviours classified as researcher ranged from 95 minutes to 154 minutes. The mean for this category was 130 minutes. Only two deans were observed during the Spring period to engage in behaviours which were classified as author. The mean for this category of activity was 32 minutes.

The data related to the Fall observations of four deans are presented in Table 28. The first cluster of behaviours, the interpersonal behaviours, occupied a range from 427 minutes to 849 minutes. The mean for the interpersonal cluster of activities was 600 minutes. The figurehead behaviours within the interpersonal cluster required commitments from the deans ranging from 31 minutes to 353 minutes. Leader behaviours demanded between 2 minutes and 370 minutes. The range for liaison behaviours was from 159 minutes to 405 minutes. Collectively, the informational cluster of behaviours utilized between 478 minutes and 1079 minutes of the deans' time. The mean for this

Table 28

Summary: Purpose of the Deans' Activities by the Time* Spent on Each (Fall Observation Period)

Purpose	Dean					
	Mean	1	2	3	4	5
Interpersonal	600	563	849	Only Spring data available.	427	561
Figurehead	187	139	353		225	31
Leader	134	72	91		2	370
Liaison	279	352	405		200	159
Informational	704	757	478		1079	501
Monitor	434	385	356		646	349
Disseminator	94	202	11		8	152
Spokesman	177	170	111		425	0
Decisional	133	169	35		68	180
Entrepreneur	40	20	25		0	116
Disturbance Handler	27	18	0		30	59
Resource Allocator	46	131	10		38	5
Negotiator	0	0	0		0	0
Scholarship	347	404	464		449	72
Teacher	305	361	405		411	41
Researcher	43	43	59		38	31
Author	0	0	0		0	0

* All times are given in minutes and are rounded to the nearest minute.

cluster of behaviours was 704 minutes. Within the decisional cluster, those activities whose purpose was judged to be of an entrepreneurial nature required commitments from the deans which ranged from 20 minutes to 116 minutes. One dean did not demonstrate any activity in this category. Also, in the category which considered activities whose purpose was the handling of disturbances, one dean did not demonstrate any activity during the three day Fall observation. The other three deans were occupied by disturbance handler activities in a range between 18 minutes and 59 minutes. Resource allocator behaviours ranged from 5 minutes to 131 minutes. During the Fall observational period, none of the deans was observed to commit any time to activities whose purpose was negotiation. The fourth cluster of behaviours, those whose purpose was scholarship, varied from 72 minutes to 464 minutes during the Fall observations. Teacher behaviours ranged from 41 minutes to 411 minutes while researcher behaviours were conducted in a range from 31 minutes to 59 minutes. During the Fall, none of the deans engaged in activities whose purpose could be classified as author.

Table 29 presents data which are the result of combining the findings of the two observational periods and considering them as a whole. The data indicate that the interpersonal cluster of behaviours required a greater amount of time than the other clusters in two cases; in two cases it required the second greatest time commitment; and in the fifth case it required the third greatest time commitment of the four clusters of behaviours. The mean for the interpersonal cluster of behaviours was 533 minutes over the two combined periods of observation. Within the interpersonal cluster, figurehead behaviours required the

Table 29

Summary: Purpose of the Deans' Activities by the Time* Spent on Each (Combined Spring and Fall Observation Periods)

Purpose		Dean				
	Mean	1	2	3**	4	5
Interpersonal	533	1104	1701	270	762	890
Figurehead	180	328	745	119	290	110
Leader	144	146	503	5	36	617
Liaison	213	631	434	146	437	203
Informational	505.5	1067	816	201	1372	896
Monitor	332	619	590	156	864	638
Disseminator	73.5	226	93	40	41	237
Spokesman	102	223	132	5	461	21
Decisional	214	629	200	199	525	471
Entrepreneur	59	148	25	0	260	116
Disturbance Handler	58	24	48	62	89	331
Resource Allocator	78.5	424	127	47	119	20
Negotiator	19.5	32	0	90	57	14
Scholarship	348.5	782	854	507	769	226
Teacher	246.5	518	603	412	577	47
Researcher	86.5	184	171	95	192	179
Author	16	80	81	0	0	0

* All times are given in minutes and are rounded to the nearest minute.
** Only data from the Spring observational period are available.

greatest amount of time in one case; leader behaviours required the most time in one case; and in three cases the greatest amount of time in this cluster of behaviours was devoted to liaison behaviours. The means for figurehead, leader, and liaison behaviours were 180 minutes, 144 minutes, and 213 minutes respectively. Among the five deans, two devoted the greatest amount of their time to informational behaviours over the two combined observation periods; one dean gave informational behaviours second priority on her time; and two gave this cluster of behaviours third priority. The mean for this cluster of behaviours was 505.5 minutes. Within the informational cluster of behaviours, all deans gave highest priority to monitor behaviours. Two deans gave second priority on their time to the disseminator behaviours and three deans gave second priority for time within this cluster of behaviours to spokesman behaviours. Mean times for this cluster of behaviours over the two combined periods of observation were 332 minutes for monitor, 73.5 minutes for disseminator, and 102 minutes for spokesman behaviours. Decisional behaviours ranked fourth among the clusters for four of the deans according to the amount of time which they devoted to this cluster of categories; one dean placed it third in priority for her use of time. The mean for the decisional cluster of behaviours was 214 minutes. The categories within the decisional cluster of behaviours varied in the order of their priority for the deans. As judged by the amount of time devoted to them, one dean ranked entrepreneur behaviours of highest priority among the categories within the decisional cluster; one dean rated disturbance handler behaviours highest; three rated resource allocator highest and one ranked negotiator highest. The means for the four categories within this decisional cluster of behaviours, i.e., entrepreneur, disturbance handler, resource allocator, and negotiator, were 59 minutes, 58 minutes, 78.5 minutes, and 19.5 minutes respectively. Over the two combined periods of observation, scholarship behaviours received the greatest amount of time, among the four clusters, from one dean; the second greatest amount of time from two deans; third greatest amount of time from one dean; and the least amount of time from one dean. The mean amount of time for the scholarship cluster of behaviours was 348.5 minutes. Among the categories within the scholarship cluster four of the deans devoted the greatest amount of time to teacher behaviours and one of the deans devoted the greatest amount of time to researcher activities. During the periods of observation only two of the deans spent any of their time in activities which were consistent with the operational definition for author behaviours. The means for each of the categories within the scholarship cluster were: teacher, 246 minutes; researcher, 86 minutes; and author, 16 minutes. Among the thirteen categories in the classification system, the teacher behaviours received the highest mean for the amount of time devoted to it by the deans. The category to which the deans devoted the least amount of time, as judged by the mean time, was author behaviour.

Individual Deans' Distribution of Time Among the Categories

Dean 1

Figure 39 represents the percentage of time that Dean 1 spent, during the Spring and Fall observations, on each of the categories within the clusters of behaviours in the classification which considers administrative activities according to the purpose for which they were

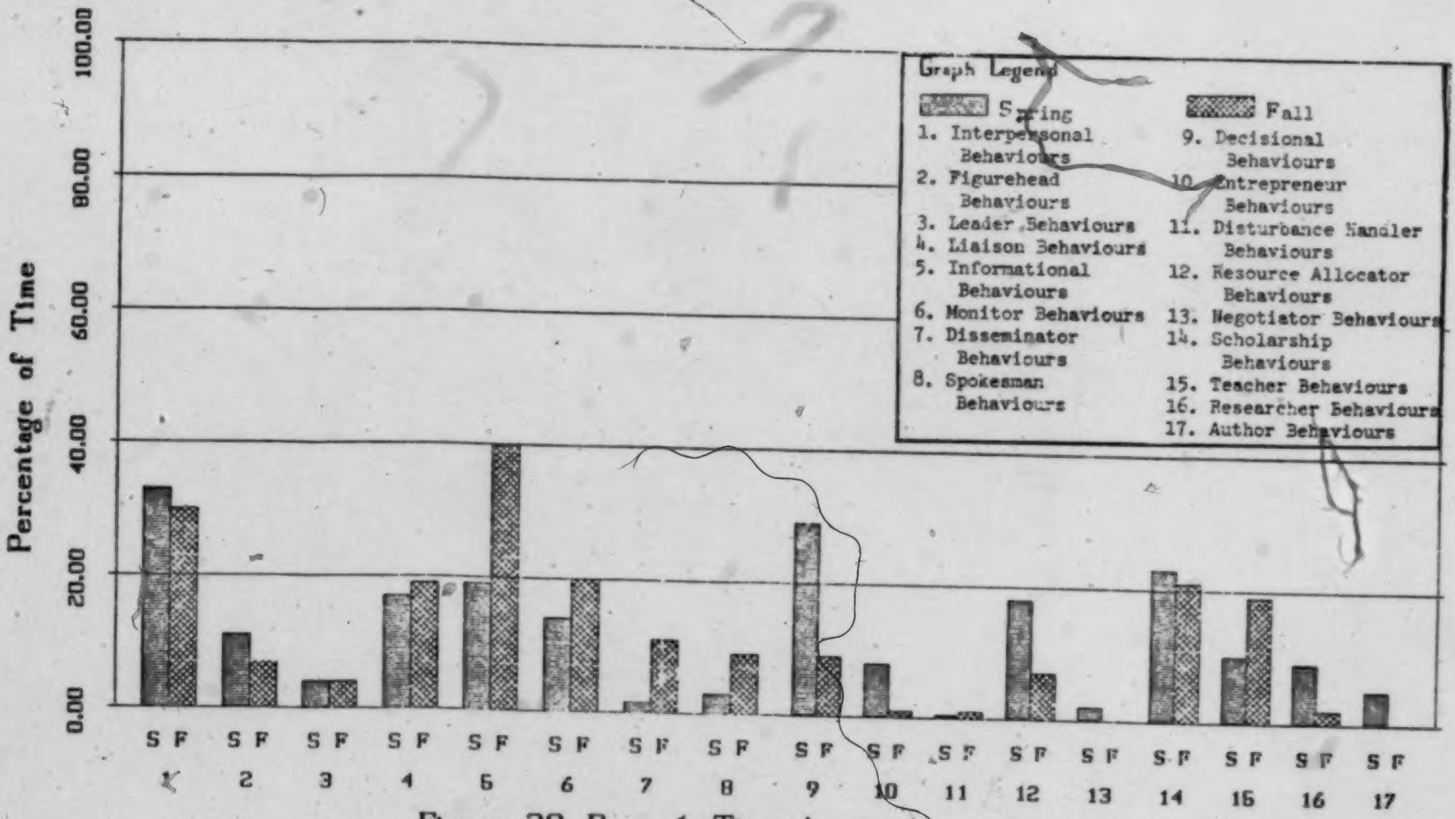


Figure 39 Dean 1 Time by purpose of activity

performed. Among the four clusters of behaviours, Dean 1 spent the greatest percentage of her Spring working time (33%) on interpersonal behaviours. During the Fall, this figure declined to 30% which placed the interpersonal cluster of behaviours second among the four categories in the percentage of Dean 1's time which it occupied. During the Spring and Fall, figurehead behaviours occupied 11% and 7% respectively of Dean 1's time. Leader behaviours occupied the same percentage (4%) of the Dean's time during both the Spring and the Fall. Liaison behaviours increased from 17% during the Spring observation to 19% during the Fall.

The cluster of behaviours which had an informational purpose required 19% of Dean 1's time during the Spring observation, but during the Fall observation this increased to 40%, the greatest proportion of time required by any of the four clusters. Within the informational cluster of behaviours, monitor behaviours required 14% of Dean 1's time during the Spring increasing to 20% during the Fall. Disseminator behaviours occupied only 1.5% of her time during the Spring but increased to 11% during the Fall observation. Similarly, spokesman behaviours increased from 3% in the Spring to 9% in the Fall.

Decisional behaviours occupied 29% of Dean 1's time during the Spring but only 9% during the Fall. Three of the four categories within this cluster of behaviours were lower in the Fall than in the Spring: entrepreneur behaviours went from 8% of Dean 1's time to 1%; resource allocator from 18% to 7%; and negotiator from 2% to 0%. The only category among the decisional cluster of behaviours to be greater in the

Fall than in the Spring was the disturbance handler category which was 0.5% during the Spring and 1% during the Fall.

Scholarship behaviours also were observed to require a lower percentage of Dean 1's time during the Fall (21%) as opposed to the Spring (23%). However, within this cluster of behaviours the teacher category of behaviour was 10% in the Spring and 19% in the Fall, while researcher behaviours and author behaviours both were observed to be fewer in the Fall (0% and 5% respectively) than in the Spring (2% and 9% respectively).

Dean 2

Figure 40 presents a graphic comparison of the percentage of time spent by Dean 2 on each of the clusters and categories in the system which classifies activities according to the purpose for which they were conducted. Data for both Spring and Fall observation periods are presented. Among the four clusters of behaviours, Dean 2 spent the most time, during both the Spring and the Fall observations, on activities whose purpose was interpersonal (44% and 48% respectively). Within this cluster of activities Dean 2 was occupied for 21% of her Spring working time with figurehead activities, and 20% of her Fall working time was so occupied. Leader behaviours required 21% of Dean 2's time during the Spring but only 5% of her time during the Fall. Liaison behaviours were only given 1.5% of Dean 2's time during the Spring but this figure rose to 23% during the Fall.

The cluster of activities which conformed to the operational definition of informational behaviours required 17% of available working

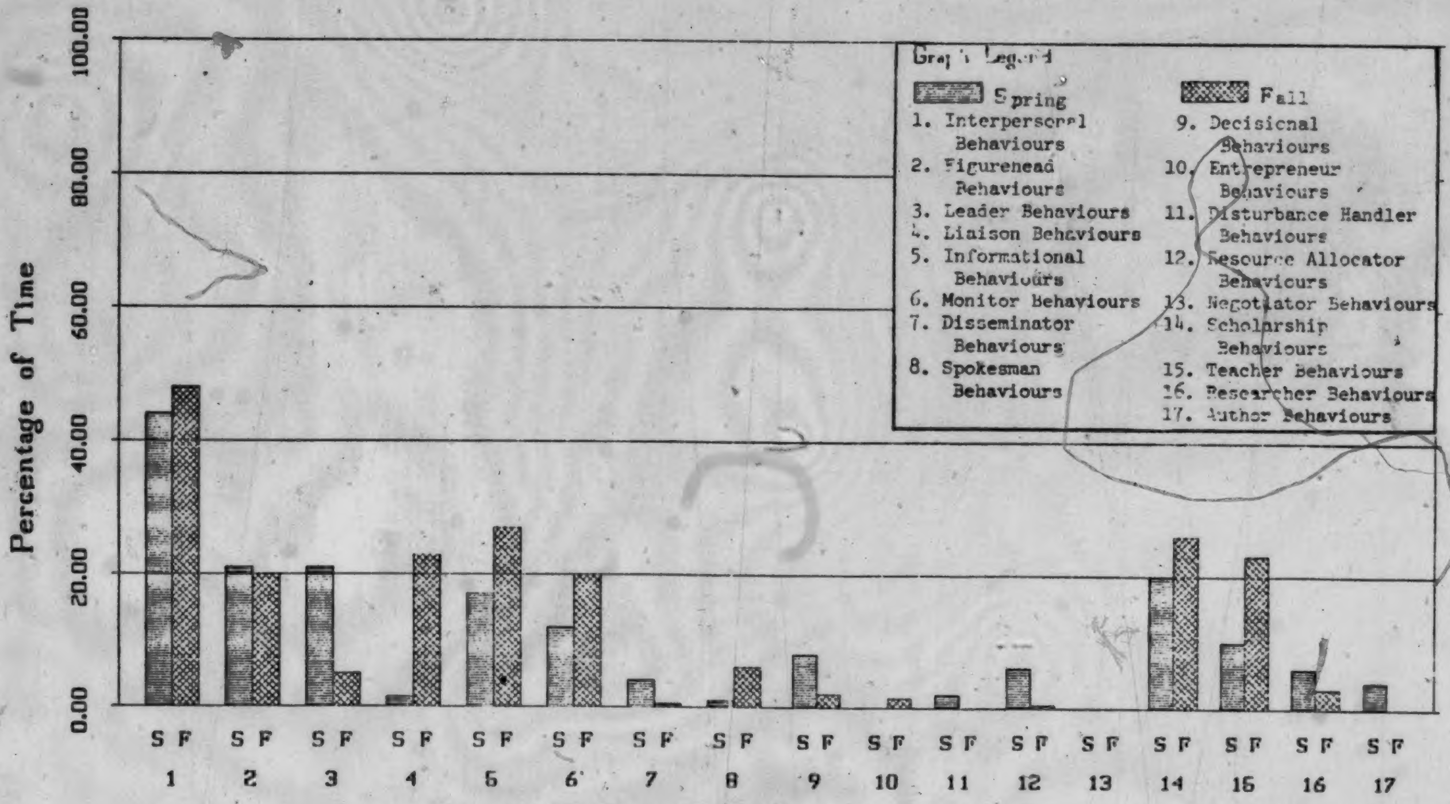


Figure 40 Dean 2 Time by purpose of activity

time during the Spring and 27% of available Fall working time. Within this cluster of behaviours, Dean 2 devoted 12% of her Spring time to monitor behaviours, and 20% of her Fall time. Disseminator behaviours received time amounting to 4% during the Spring but only 0.5% during the Fall. During the Spring, 1% of Dean 2's time was given to spokesman behaviours, while 6% was used for this category during the Spring.

Decisional behaviours occupied 8% of Dean 2's Spring working time and only 2% of her Fall working time. Within this cluster, no time was spent on entrepreneur behaviours during the Spring observation but 1.5% was spent on this category during the Fall. In the Spring, 2% of Dean 2's time was spent on disturbance handler activities while no time was spent on this category of behaviour during the Fall. Resource allocator behaviours required 6% of available working time during the Spring observation but only 0.5% during the Fall period. No time was used by Dean 2 during either of the observation periods to engage in negotiator behaviours.

The cluster of behaviours which was labelled as scholarship required 20% of Dean 2's time during the Spring and 26% during the Fall. Dean 2 devoted 10% of her time during the Spring observation to teacher behaviours and 23% during the Fall observation period. Researcher behaviours received 6% of Dean 2's time during the Spring and 3% during the Fall observation. Those behaviours which were consistent with the operational definition of author received 4% of Dean 2's time during the Spring but none of her time during the Fall observations.

Dean 3

As stated previously, only Spring data are available for Dean 3. Figure 41 illustrates that 18% of Dean 3's time was spent in interpersonal behaviours. Figurehead, leader, and liaison behaviours required 8%, 0.3%, and 10%, respectively, of Dean 3's time. The informational cluster of behaviours utilized 13% of Dean 3's time during observation. Within this cluster, the categories of monitor, disseminator, and spokesman required 10%, 2.5%, and 2.5%, respectively, of the dean's time. Activities whose purpose was decisional required 13% of Dean 3's time. No time was spent on entrepreneur behaviours during observation. Disturbance handler, resource allocator, and negotiator behaviours required 4%, 3%, and 6% respectively of her time. The scholarship cluster of behaviours utilized almost twice as much of Dean 3's time (34%) as any other single cluster of behaviours. Teacher behaviours and researcher behaviours utilized 27% and 7% respectively of the Dean's time. No time was spent on author behaviours by Dean 3.

Dean 4

During the Spring, as shown in Figure 42, Dean 4 spent 20% of her time on interpersonal behaviours, and during the Fall she spent 19% of her time on this cluster of behaviours. Within the cluster, figurehead behaviours changed from 4% in the Spring to 10% in the Fall; whereas leader behaviours were 2% in the Spring and 0.1% in the Fall. Liaison behaviours also decreased from 14% during the Spring observation to 9% during the Fall observation.

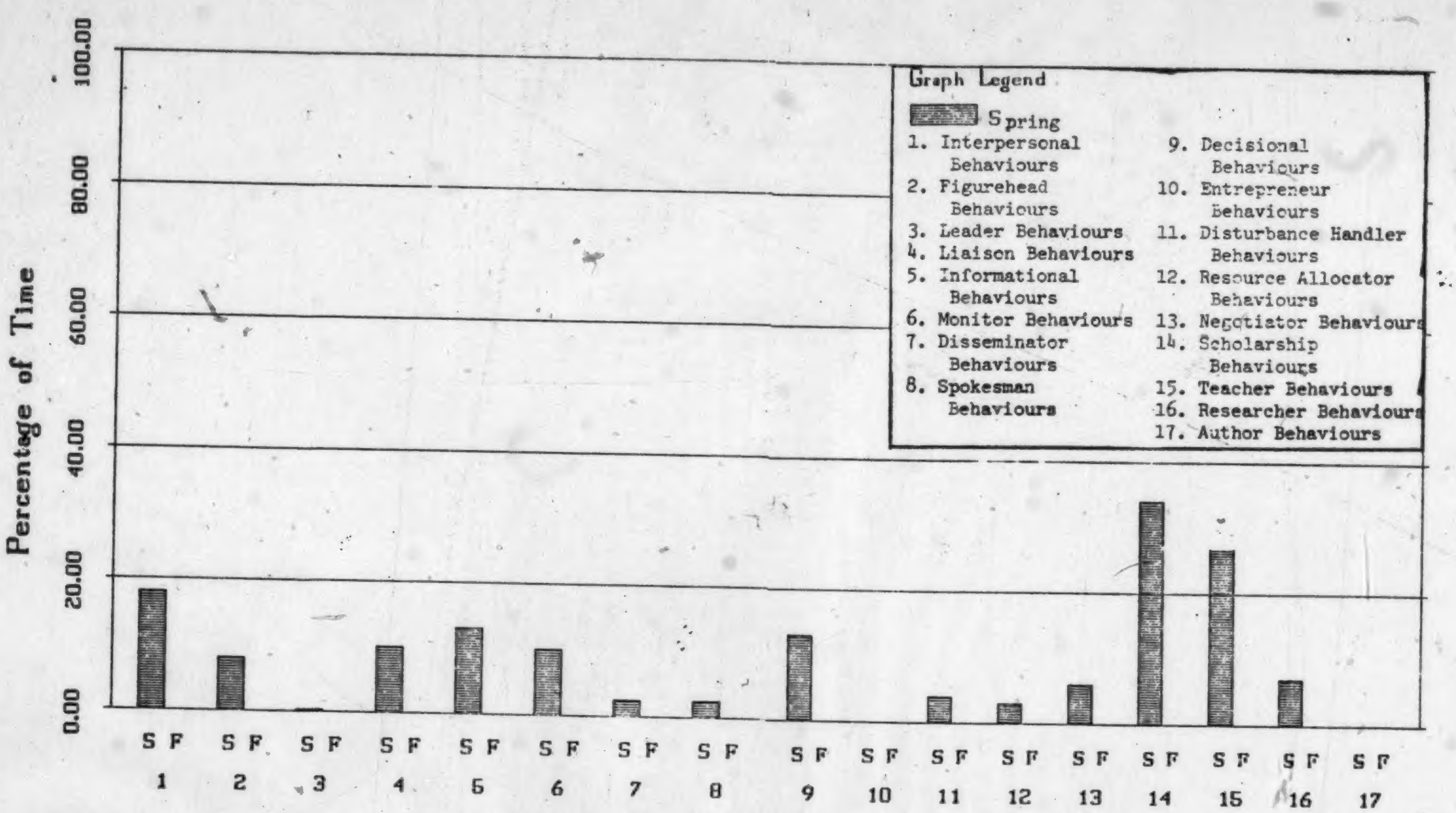


Figure 41 Dean 3 Time by purpose of activity

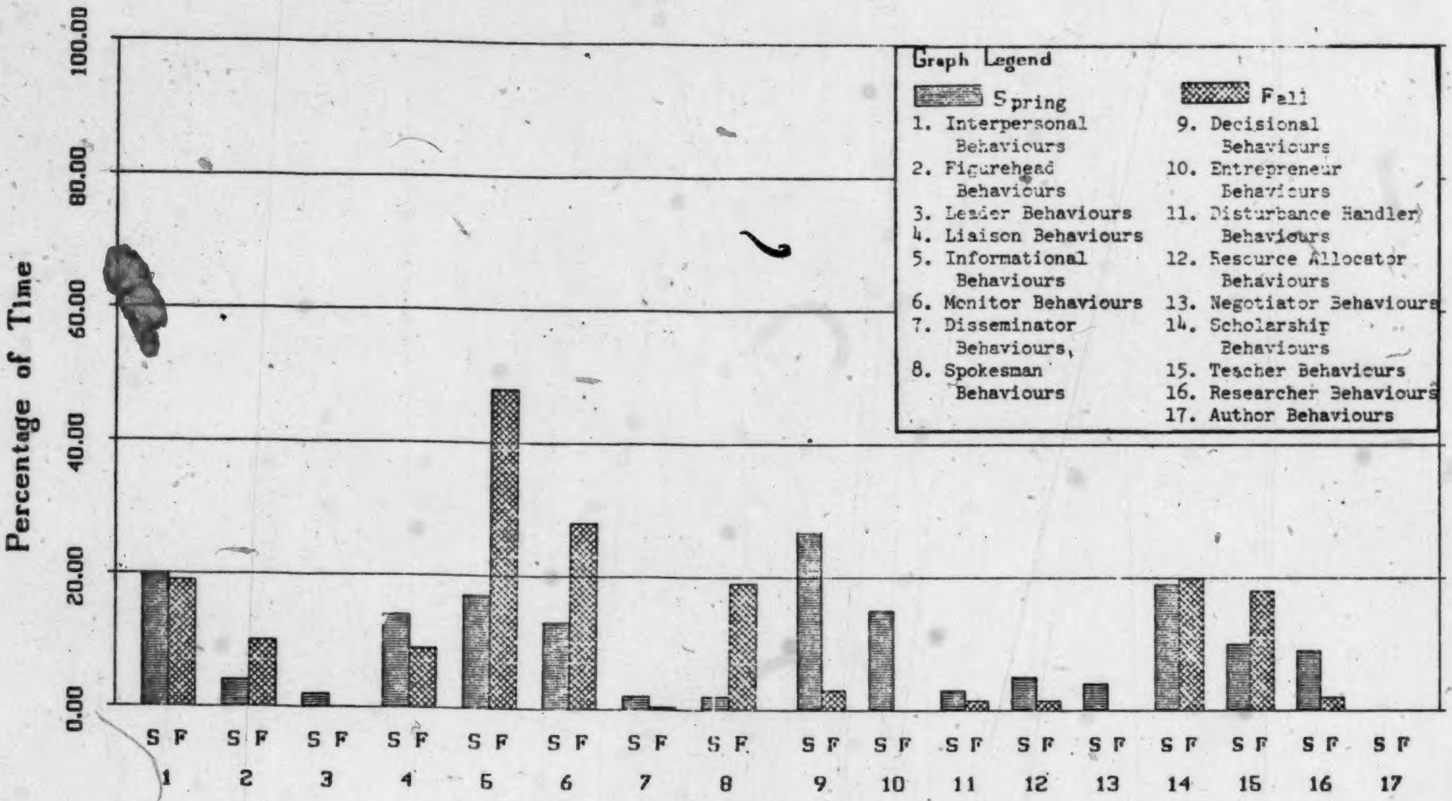


Figure 42 Dean 4 Time by purpose of activity

Informational behaviours required 17% of Dean 4's time during the Spring but, during the Fall, the figure for this cluster of behaviours rose to 48%, the largest percentage for any category during that three day observation period. Spring monitor behaviours occupied 13% of Dean 4's time whereas Fall monitor behaviours occupied 28% of her time. Disseminator behaviours were 2% in the Spring and 0.4% during the Fall observations. During the Spring observation period, spokesman behaviours took 2% of Dean 4's time but in the Fall the figure for this category of behaviour rose to 19%.

Decisional behaviours required 27% of available working time during the Spring but only 3% during the Fall. During the Spring, the categories within the decisional cluster, i.e., entrepreneur, disturbance handler, resource allocator, and negotiator, required 15%, 3%, 5% and 4%, respectively, of Dean 4's time. In the Fall observation period, no time was spent on either entrepreneur or negotiator behaviours and exactly equal percentages (1.5%) were spent on disturbance handler and resource allocator behaviours.

The percentages of time that Dean 4 allocated to scholarship behaviours during the Spring and the Fall were nearly the same (19% and 20% respectively). During the Spring, teacher behaviours and researcher behaviours received 10% and 9% respectively of the Dean's time. During the Fall these two categories received 18% and 2% respectively of Dean 4's time. No time was spent, during either observation period, on author behaviours.

Dean 5

Interpersonal behaviours, as shown in Figure 43, occupied 25% of Dean 5's working time during the Spring observation period and 41% during the Fall observation period. The categories within this cluster of behaviours required the following percentages of Dean 5's time during the Spring: figurehead, 6%; leader, 16%; and liaison, 3%. During the Fall observation, figurehead behaviours required less (2%) of the Dean's time, whereas, both leader and liaison behaviours required larger percentages of time (27% and 12% respectively).

The cluster of behaviours which had informational purposes required 31% of Dean 5's time during the Spring and 27% of her time during the Fall observations. Monitor behaviours accounted for 22% and 26% of the Dean's time during the Spring and Fall, respectively. In the Spring, 7% of Dean 5's time was devoted to disseminator behaviours while 11% was devoted to this category during the Fall. Spokesman behaviours received 2% of the Dean's time during the Spring but none of her time during the Fall observation period.

Decisional behaviours occupied 23% and 13% of Dean 5's time during the Spring and Fall, respectively. No time at all was spent on entrepreneur behaviours during the Spring observations but 9% of the dean's time was allocated to this category during the Fall. The percentage of time utilized in behaviours which conformed to the operational definition of disturbance handler was 21% during the Spring but declined to 4% during the Fall. Resource allocator behaviours occupied 1% of Dean 5's time during the Spring and an almost negligible

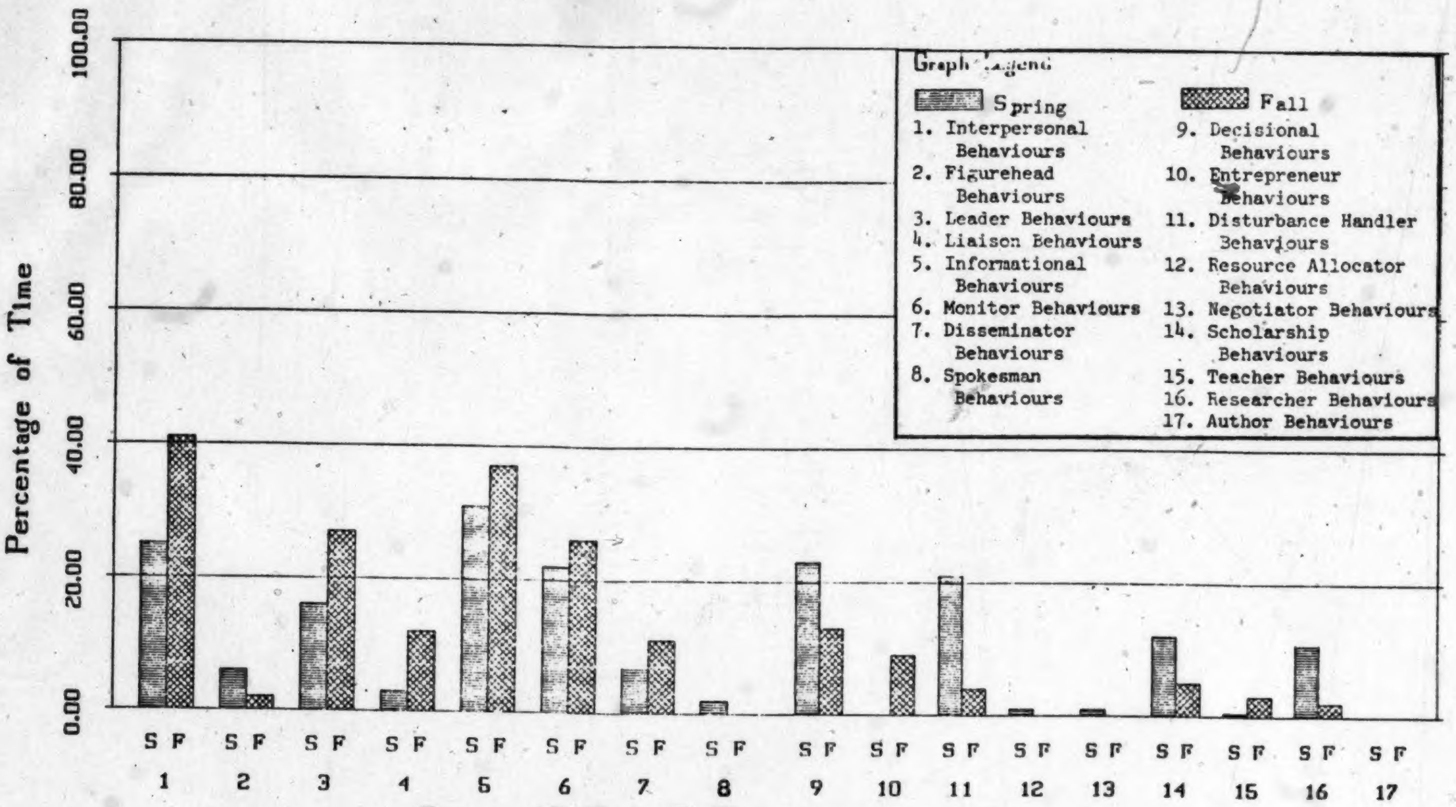


Figure 43 Dean 5 Time by purpose of activity

0.03% during the Fall. The Spring observation demonstrated that 1% of this Dean's time was spent in negotiator behaviours whereas no time at all was spent on this category during the Fall observations.

During the Spring and Fall, the scholarship cluster of behaviours received 12% and 5% respectively of Dean 5's attention, as determined by the percentage of time. Teacher behaviours only required 0.5% of Dean 5's time during the Spring but they required 3% of her time during the Fall. Researcher behaviours received 11% and 2% of Dean 5's time during the Spring and Fall, respectively. Dean 5 spent no time at all on author behaviours during either observation period.

Distribution of the Deans' Time by Individual Category of Purpose

Interpersonal Behaviours

The interpersonal cluster of behaviours is comprised of those behaviours which deal primarily with relationships. The categories of behaviours found within this cluster were figurehead, leader, and liaison behaviours. Table 30 presents a summary of the amount of time and the number of activities which the deans committed to this cluster of behaviours. During the Spring observation period, the number of interpersonal activities that the individual deans were involved in varied from 14 to 27, whereas in the Fall the range was wider, extending from 10 to 36. The resulting average number of interpersonal behaviours per day ranged from 4.6 to 9 during the Spring observations and from 4.6 to 12 during the Fall. The amount of time that the deans spent on interpersonal behaviours, during the Spring and Fall observations,

Table 30

Summary: The Deans' Interpersonal Behaviours by Amount of Time and Number of Activities

Interpersonal Behaviours	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of interpersonal behaviours	20	24	44	27	14	41	14			18	10	28	24	36	60
Average number of interpersonal behaviours per day	6.6	8	7.3	9	4.6	6.8	4.6			6	3.3	4.6	8	12	20
Time* spent on interpersonal behaviours	541	563	1104	853	849	1701	270			335	427	762	329	561	890
Average duration of each interpersonal behaviour	27	23	25	32	61	47	19			19	43	31	14	47	30.5

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observational data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

varied from 270 minutes to 853 minutes and from 427 minutes to 849 minutes respectively. The average Spring duration of each interpersonal behaviour ranged from 19 minutes to 27 minutes, while the Fall average duration varied between 23 minutes and 61 minutes. Figure 44 illustrates the percentage of time committed by each of the deans to this cluster of behaviours during the Spring and Fall observation periods, as well as for the two periods combined. The mean percentage of time utilized by the deans in this fashion during the Spring was 29%, during the Fall was 33%, and over the two periods combined was 31%. During both the Spring and Fall observations, Dean 2 used a greater percentage of her time for interpersonal behaviours (44% and 48% respectively) than did any of the other deans. The least amount of time used in this way was 18% (Dean 3, Spring observation). Dean 1 committed 33% and 30% of her time to interpersonal behaviours during the Spring and Fall observation periods respectively. Dean 4 required 20% of her Spring working time for interpersonal behaviours and 19% for this cluster during the Fall. During the Spring, Dean 5 was occupied for 25% of her time with interpersonal behaviours but in the Fall this figure rose to 41%.

Figurehead Behaviours. The data presented in Table 31 summarizes those activities of the deans' which conformed to the operational definition of figurehead behaviours. The Spring range for the number of figurehead behaviours was 3 to 9 and the Fall range was similar, 3 to 8. The average number of figurehead behaviours per day during the Spring was between 1 and 3 as opposed to the slightly narrower Fall range of 1 to 2.6. Time spent on figurehead behaviours

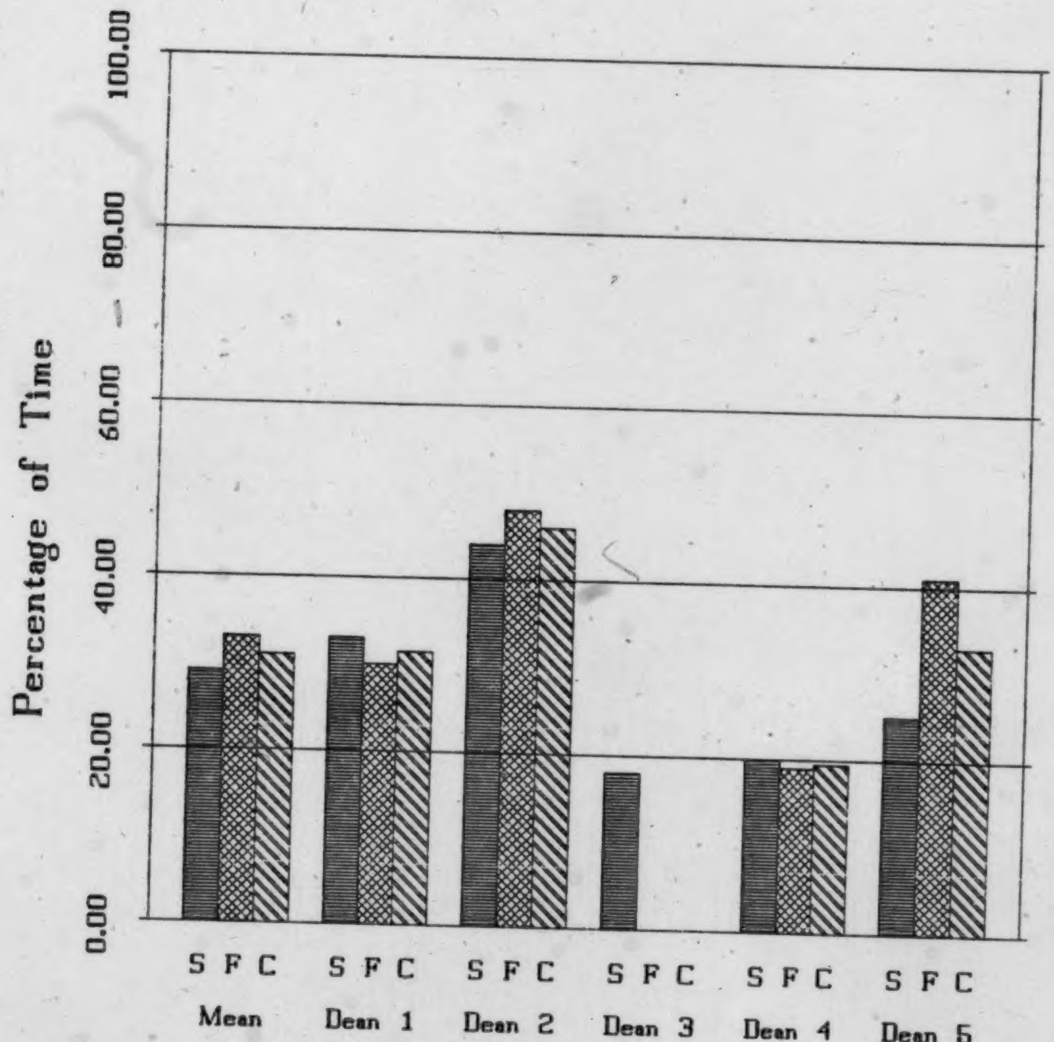


Figure 44 Interpersonal Behaviours by Time

Graph Legend

▤ S
▨ F
▧ C

Table 31

Summary: The Deans' Figurehead Behaviours
by Amount of Time and Number of Activities

Figurehead Behaviours	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of figurehead behaviours	9	3	12	5	8	13	5			3	5	8	4	4	8
Average number of figurehead behaviours per day	3	1	2	1.6	2.6	2.1	1.6			1	1.6	2.6	1.3	1.3	2.6
Time* spent on figurehead behaviours	189	139	328	412	353	745	119			65	225	290	79	31	110
Average duration of each figurehead behaviour	21	46	33.5	82	44	63	24			22	45	33.5	20	8	14

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observational data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

during the Spring varied from 65 minutes to 412 minutes while the Fall range for time spent on this category of behaviour was 31 minutes to 353 minutes. The deans varied in the Spring average duration for each figurehead behaviour from 20 minutes to 82 minutes while the average Fall duration was between 8 minutes and 46 minutes. Figure 45 graphically illustrates the percentage of time spent by the deans, during observation, on figurehead behaviours. The means for figurehead behaviours during the Spring, Fall, and the two periods combined are all identical (10%). Dean 2 devoted the most time of all the deans to this type of behaviour, 21%, 20%, and 20.5% for the Spring, Fall, and combined periods respectively. The lowest amounts of time designated for this category were 6%, 2%, and 4% for Spring, Fall, and the two periods combined respectively (Dean 5). Dean 1 was occupied for 11%, 7% and 9% of her time during the Spring, Fall, and combined periods respectively. Dean 3, for whom there is only Spring data available, spent 8% of her time in this category of behaviour. Dean 4 allocated 4% of her working time during the Spring observation to figurehead behaviours and 10% of her time during the Fall observation to this type of behaviour resulting in 7% over the two periods combined.

Leader Behaviours. Table 32 summarizes the data related to the leader behaviour category within the interpersonal cluster of behaviours. The number of behaviours that the deans utilized for leader behaviour during the Spring varied from 3 to 21; during the Fall they varied from 1 to 27. The average number of leader behaviours per day for Spring was between 1 and 7 while the Fall range was .3 to 9. The deans spent between 5 minutes and 412 minutes on the category of

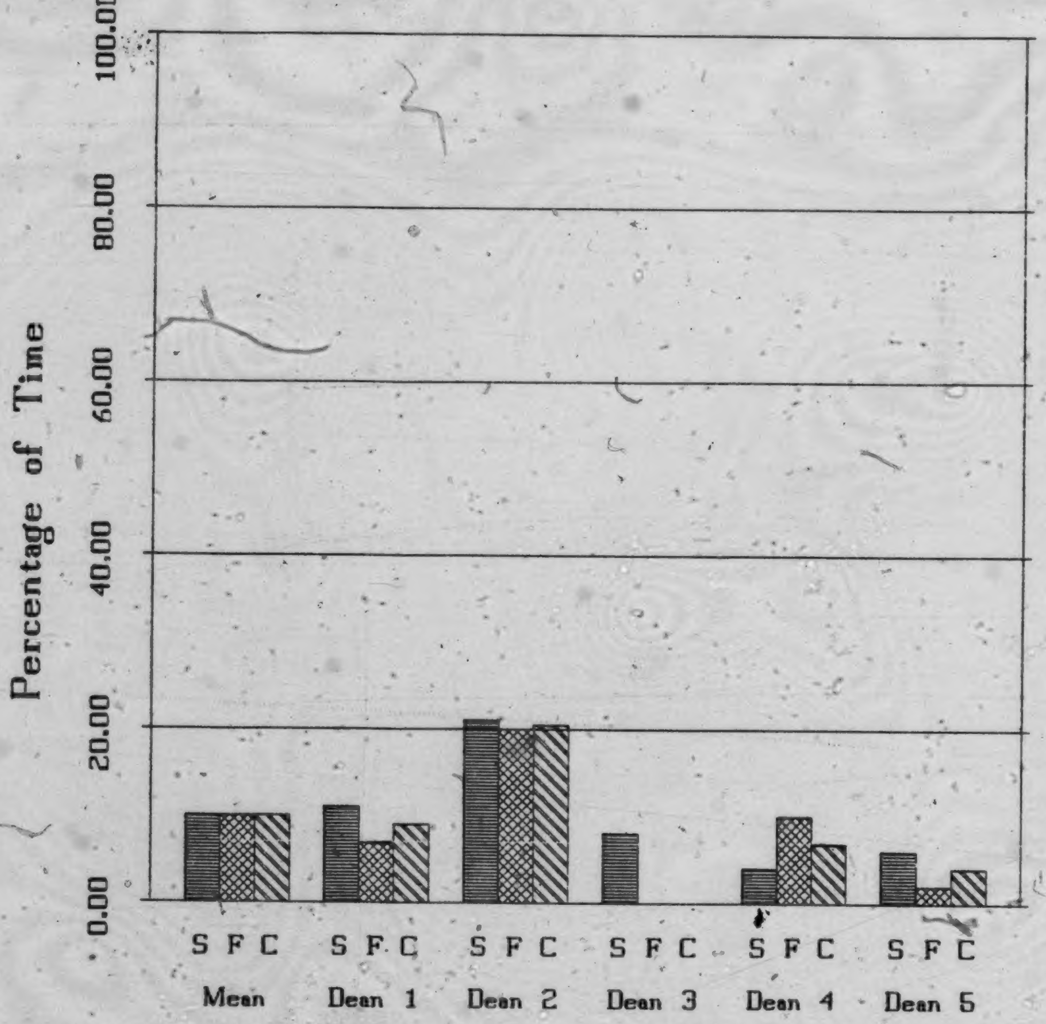


Figure 45 Figurehead Behaviours by Time

Graph Legend

▤ S
▦ F
▧ C

Table 32

Summary: The Deans' Leader Behaviours
by Amount of Time and Number of Activities

Leader Behaviours	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of leader behaviours	6	7	13	21	4	25	3			8	1	9	18	27	45
Average number of leader behaviours per day	2	2.3	2.1	7	1.3	4.1	1			2.6	.3	1.5	6	9	7.5
Time* spent on leader behaviours	74	72	146	412	91	503	5			34	2	36	206	370	617
Average duration of each leader behaviour	12	10	11	20	23	21.5	1.6			4	2	4	11	14	12.5

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observational data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

behaviour during the Spring and maintained a similarly wide distribution of time, 2 minutes to 370 minutes, during the Fall observation period. The highest average duration of each leader behaviour was 20 minutes for the Spring and 23 minutes for the Fall. The lowest average duration of each leader behaviour was 1.6 minutes in the Spring and 2 minutes in the Fall. Figure 46 illustrates the percentage of the deans' time used for leader behaviours. The mean percentages of time used during the Spring, Fall, and combined observation periods were 10%, 8%, and 9% respectively. Dean 1 used exactly the same percentage of time (4%) for both the Spring and Fall observation periods. Leader behaviours required 21% of Dean 2's time during the Spring but only 5% during the Fall. Dean 3 used 0.6% of her time for this purpose during the one period that she was observed. Dean 4 allocated 2% and 0.1% of her time to leader behaviours during the Spring and Fall observation periods respectively. Dean 5 spent more time than the other deans on this category of behaviour in both the Spring and Fall observations (16% and 27% respectively).

Liaison Behaviours. As shown in Table 33, the number of liaison behaviours in which the deans were involved during the Spring observations varied from 2 to 14, and the Fall observations demonstrated a range which varied between the same figures (2 and 14). Obviously, the Spring and Fall averages for the number of liaison behaviours per day were also within an identical range, specifically 0.6 to 4.6. The amount of time which the deans devoted to this category of behaviour ranged from 29 minutes to 279 minutes during the Spring and from 159 to 405 minutes during the Fall. The average duration of liaison behaviours

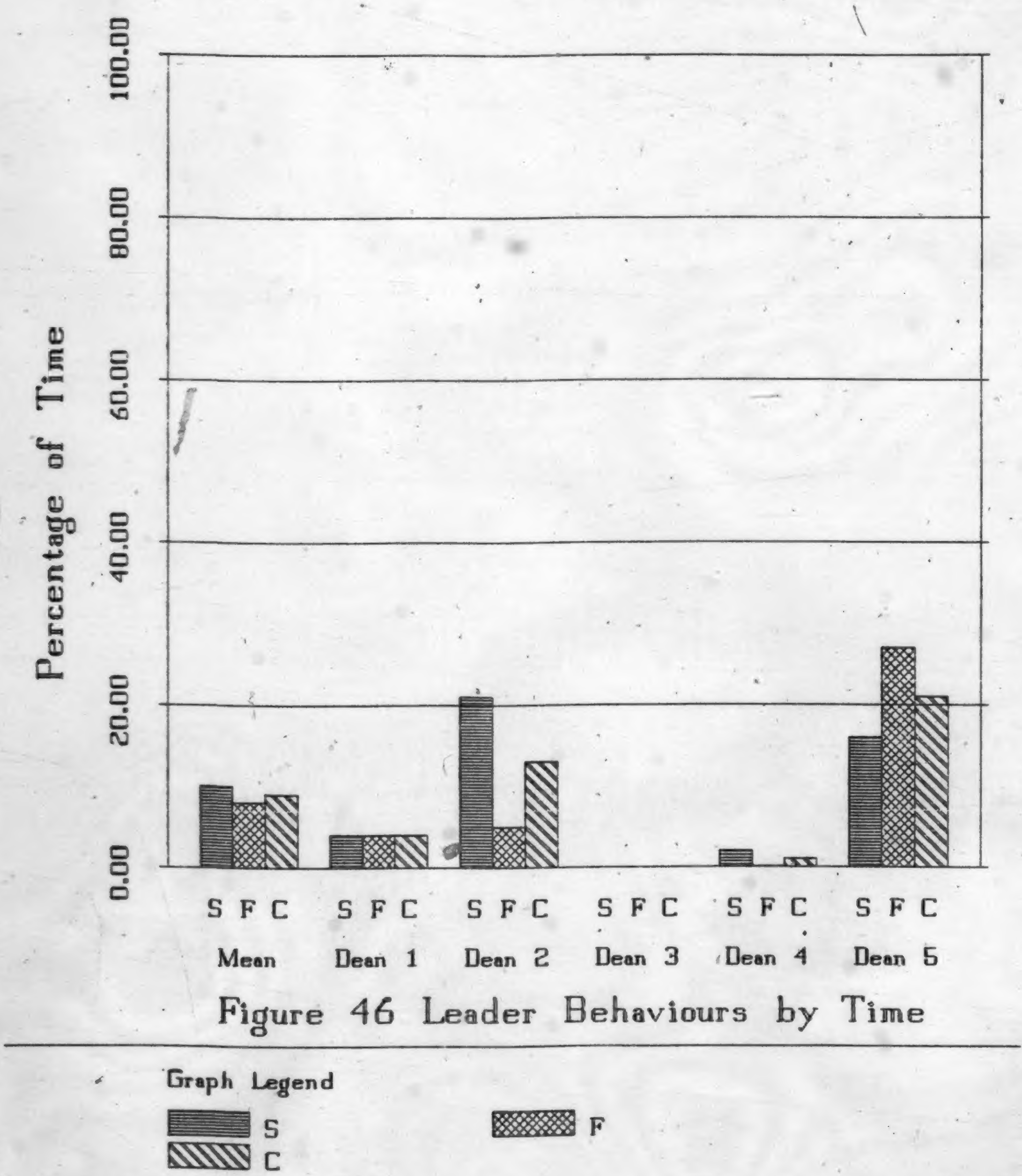


Figure 46 Leader Behaviours by Time

Table 33

Summary: The Deans' Liaison Behaviours by Amount of Time and Number of Activities

Liaison Behaviours	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of liaison behaviours	5	14	19	2	2	4	14			7	4	11	3	5	8
Average number of liaison behaviours per day	1.6	4.6	3.1	.6	.6	.6	4.6			2.3	1.3	1.8	1	1.6	1.3
Time* spent on liaison behaviours	279	352	631	29	405	434	270			237	200	437	44	159	203
Average duration of each liaison behaviour	56	25	40.5	15	202	109	19			34	50	24	15	32	24

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observational data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

during the Spring was between 15 minutes and 56 minutes, whereas during the Fall observations the range was 25 minutes to 202 minutes. Figure 47 permits comparison of the percentage of time that the deans spent on liaison behaviours. The mean percentages of time devoted to this category of behaviour by all of the deans was 9% for the Spring observation period, 15% for the Fall observations, and 12% over the two periods of observation combined. Dean 1 used 17% of her time in this fashion during the Spring observations and 19% during the Fall. Dean 2 used only 1.5% of her Spring working time on liaison behaviour but this increased to 23% during the Fall. Dean 3 was observed to spent 10% of her time in this manner during the Spring observations, which is the only period for which data are available. During the Spring, 14% of Dean 4's time was spent on liaison behaviours while 9% of her time was committed to this category of behaviour during the Fall. Dean 5 used 3% of her available working time during the Spring for liaison behaviours and 12% of available Fall working time.

Informational Behaviours

Data related to that cluster of behaviours which deals with information processing are found in Table 34. The categories of behaviour which are included in this cluster are monitor, disseminator and spokesman. The number of informational behaviours in which the deans were engaged ranged from 19 to 46 during the Spring and from 35 to 47 during the Fall. The average number of behaviours occurring in this cluster per day in the Spring observation varied from a high of 15.3 to a low of 6.3. The highest average daily number of informational behaviours in the Fall was 15.6 and the lowest was 11.6 The deans

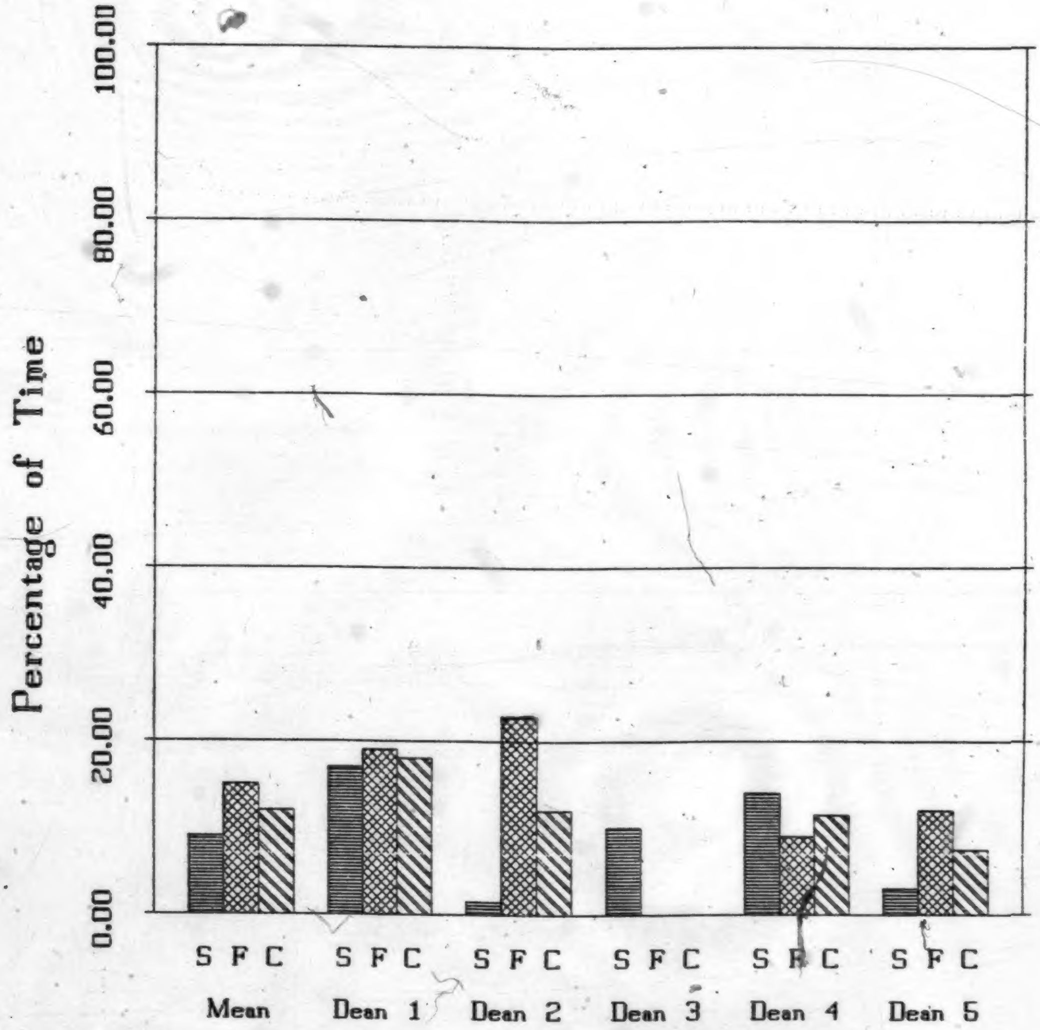


Figure 47 Liaison Behaviours by Time

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Table 34

Summary: The Deans' Informational Behaviours by Amount of Time and Number of Activities

Informational Behaviours	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of informational behaviours	43	42	85	39	35	74	19			24	41	65	46	47	93
Average number of informational behaviours per day	14.3	14	14.1	13	11.6	12.3	6.3			8	13.6	10.8	15.3	15.6	31
Time* spent on informational behaviours	310	757	1067	338	478	816	201			293	1079	1372	395	501	896
Average duration of each informational behaviour	7	18	13	8.6	14	11.3	11			12	26	19	9	11	10

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observational data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

committed between 201 minutes and 395 minutes to informational behaviours during the Spring and between 478 minutes and 1079 minutes in the Fall. The average duration of an informational behaviour ranged from 7 minutes to 12 minutes during the Spring and 11 minutes to 26 minutes in the Fall. Figure 48 illustrates the percentage of time that the deans spent on informational behaviours. In all cases the percentage of time increased from Spring to Fall. The means for the percentage of time spent on informational activities by all the deans during the Spring and Fall observation periods were 19% and 39% respectively. Dean 1 increased her Fall commitment to 40% from the Spring commitment of 19%. Dean 2 used 17% of her Spring working time for informational behaviours and 27% of her Fall time. Dean 3 spent 13% of her time during the Spring observation on the informational cluster of activities. The greatest increase from Spring to Fall was demonstrated by Dean 4 who used 17% of her Spring time for informational behaviours but used 48% of her Fall working time for this cluster of behaviours. Dean 5 increased the amount of time that she spent on informational behaviours from 31% to 37% for the Spring and Fall respectively.

Monitor Behaviours. The data presented in Table 35 summarize the deans' monitor behaviours. The number of monitor behaviours in the Spring observation period ranged from a high of 33 to a low of 12 while the Fall figures varied from 28 to 24. The average daily number of monitor behaviours during the Spring was between 4 and 11 while in the Fall it was between 9.3 and 11.3. The amount of time allocated by the deans to this category of behaviour was between 156 minutes and 289 minutes in the Spring and between 349 minutes and 646 minutes in the

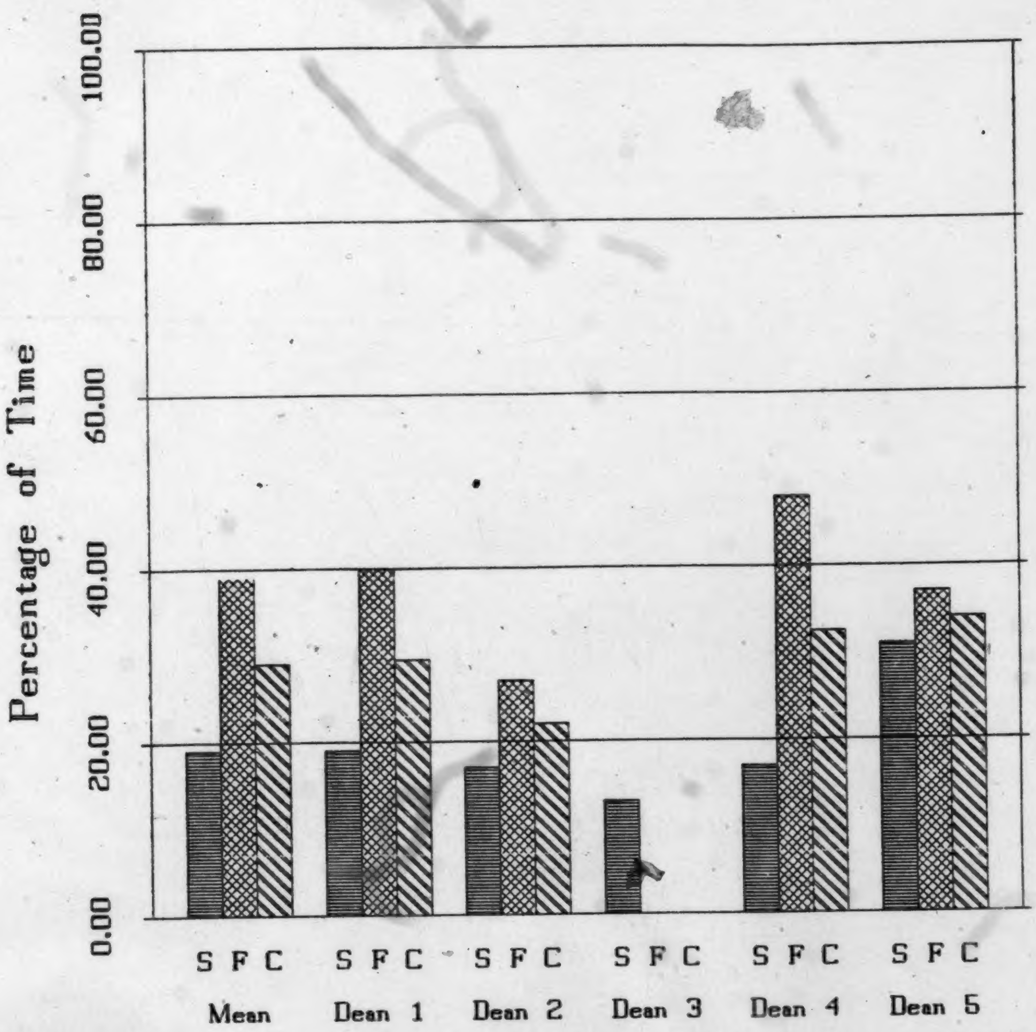

Figure 48 Informational Behaviours by Time

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Table 35

Summary: The Deans' Monitor Behaviours by Amount of Time and Number of Activities

Monitor Behaviours	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of monitor behaviours	33	28	62	27	28	55	12			21	32	53	29	34	63
Average number of monitor behaviours per day	11	9.3	10.1	9	9.3	9.1	4			7	10.6	8.8	9.6	11.3	10.5
Time* spent on monitor behaviours	234	385	619	235	356	590	156			217	646	864	289	349	638
Average duration of each monitor behaviour	7	14	10.5	9	13	11	13			10	20	15	10	10	10

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observational data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

Fall. The average duration of monitor behaviours ranged from 7 minutes to 13 minutes during the Spring and from 10 minutes to 14 minutes in the Fall. Figure 49 illustrates the percentage of time that the deans spent on monitor behaviours during the study. The means for Spring and Fall observation periods were 14% and 24% respectively, resulting in a mean of 21.5% over the two periods combined. Again, all of the deans demonstrated an increase in the percentage of time devoted to monitor behaviours in the Fall as opposed to the Spring observation period. Dean 1 increased her commitment from 14% to 20% for the Spring and Fall respectively. During the Spring observation, Dean 2 used 12% of her working time for monitoring behaviours and increased this figure to 20% during the Fall. Monitor behaviours required 10% of Dean 3's time during observation. Dean 4 devoted 13% and 28% of her time to monitor behaviours during the Spring and Fall respectively. During the Spring, Dean 5 spent 22% of her working time on monitor behaviours and 26% of her Fall working time on them.

Disseminator Behaviours. The data presented in Table 36 summarize those activities of the deans which conformed to the operational definition of disseminator behaviours. The number of such behaviours in which the deans were engaged ranged from 2 to 15 during the Spring observation period and from 1 to 13 during the Fall observation period. The daily average for disseminator behaviours varied from 0.6 to 5 in the Spring and from 0.3 to 4.3 during the Fall. The deans spent from 24 minutes to 85 minutes on disseminator behaviours during the Spring and from 8 minutes to 202 minutes during the Fall. The average duration of monitor behaviours exhibited an equally wide range:

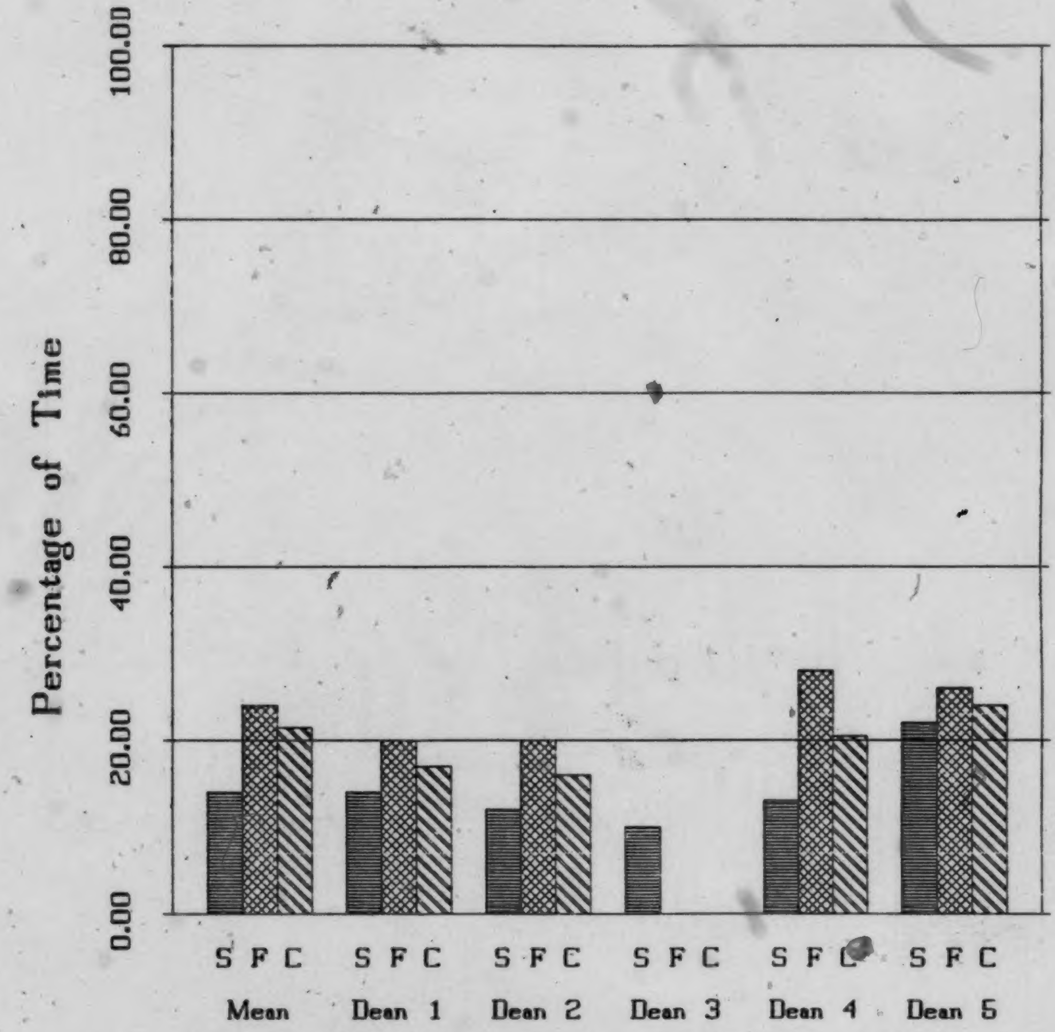

Figure 49 Monitor Behaviours by Time

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Table 36

Summary: The Deans' Disseminator Behaviours
by Amount of Time and Number of Activities

Disseminator Behaviours	Dean 1			Dean 2			Dean 3**			Dean 4			Dean 5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of disseminator behaviours	4	9	13	10	3	13	5			2	1	3	15	13	28
Average number of disseminator behaviours per day	1.3	3	2.1	3.3	1	2.1	1.6			.6	.3	.5	5	4.3	9.3
Time* spent on disseminator behaviours	24	202	226	82	11	93	40			33	8	41	85	152	237
Average duration of each disseminator behaviour	6	22	14	8	3.6	5.8	8			16.5	8	12.3	3.9	12	8.5

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observational data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

6 minutes to 16.5 minutes during the Spring, and 3.6 minutes to 22 minutes during the Fall. These figures actually represent very small percentages of the deans' total working time, as illustrated in Figure 50. The mean percentages of time spent by all the deans during the Spring, Fall, and two combined observation periods were 3%, 5%, and 4% respectively. Dean 1 allocated 1.5% and 11% of her working time to disseminator behaviours during the Spring and Fall respectively. This category of activities required 4% and 0.5% of Dean 2's time in the Spring and Fall respectively. Dean 3 used only 2.5% of her time for this purpose and Dean 4 used only 2% in the Spring and 0.4% in the Fall for disseminator behaviours. This category of behaviour occupied 7% and 11% of Dean 5's time during the Spring and Fall respectively.

Spokesman Behaviours. Table 37 contains data which is related to the spokesman behaviours of the deans. The number of behaviours in this category that were observed ranged from 1 to 6 during the Spring. During the Fall, Dean 5 did not spend any time on this category. The Fall range for number of behaviours, excluding Dean 5, was 4 to 8. The Spring daily average for the number of spokesman behaviours was between 0.3 and 2, while the Fall daily average was between 0 and 2.6. The deans spent between 5 minutes and 52 minutes on spokesman behaviours in the Spring and between 0 minutes and 425 minutes in the Fall. The average duration of a spokesman behaviour during the Spring varied from 2.5 minutes to 36 minutes. The lowest average duration in the Fall, aside from 0 for Dean 5, was 28 minutes, while the highest average duration was 53 minutes. The percentages of the deans' time that spokesman behaviours required is illustrated in Figure 51. The three

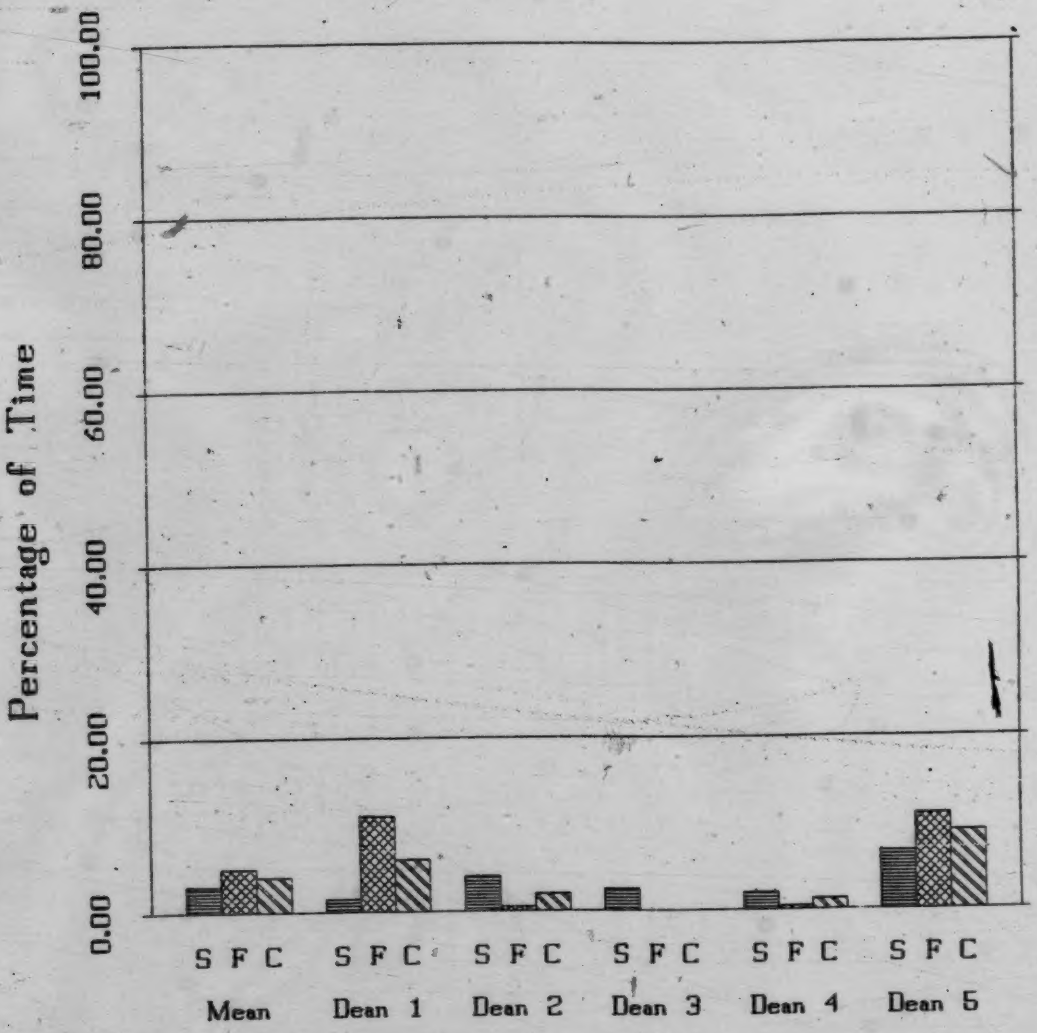

Figure 50 Disseminator Behaviours by Time

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Table 37

Summary: The Deans' Spokesman Behaviours
by Amount of Time and Number of Activities

Spokesman Behaviours	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of spokesman behaviours	6	5	11	2	4	6	2			1	8	9	2	0	2
Average number of spokesman behaviours per day	2	1.6	1.8	.6	1.3	1	.6			.3	2.6	3	.6	0	.3
Time* spent on spokesman behaviours	52	170	223	21	111	132	5			36	425	461	21	0	21
Average duration of each spokesman behaviour	9	34	21.5	11	28	19.5	2.5			36	53	44.5	11	0	11

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observational data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

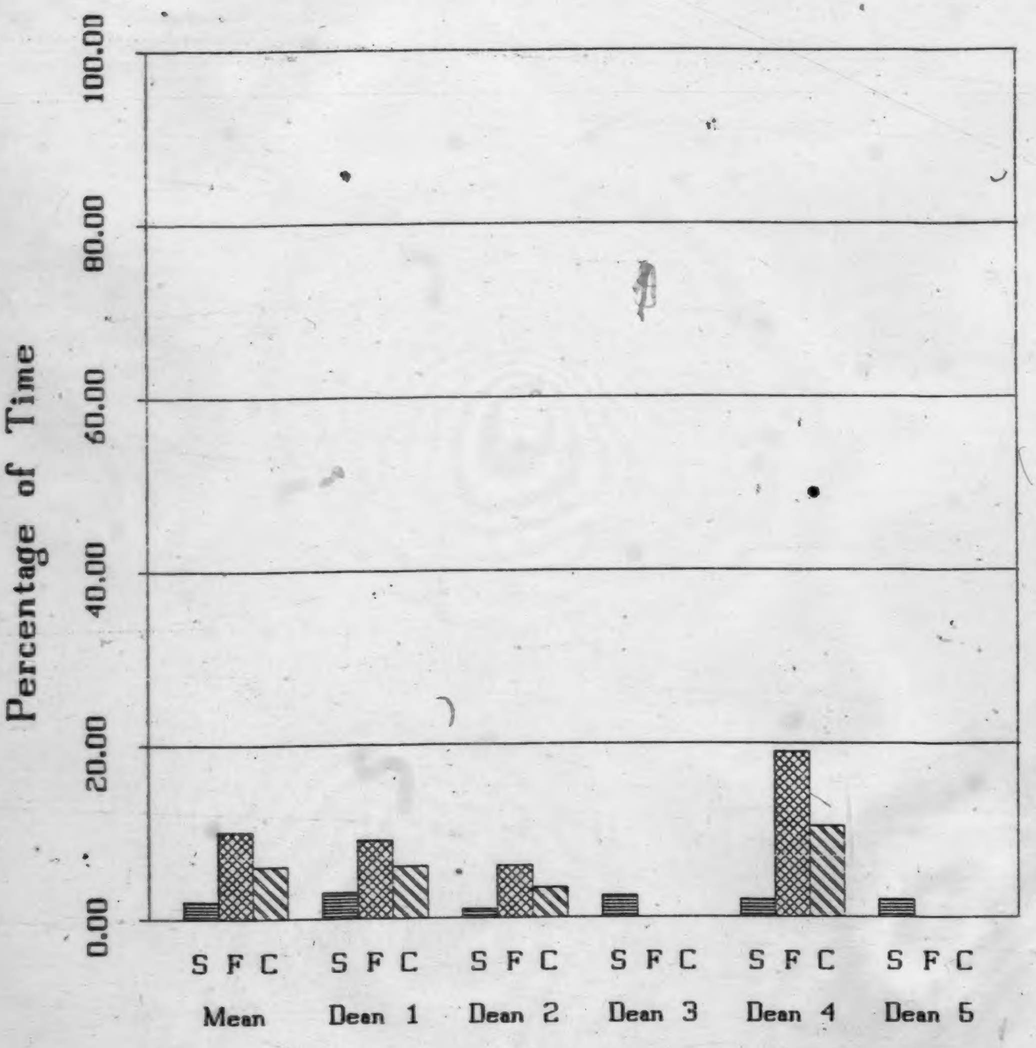

Figure 51 Spokesman Behaviours by Time

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means for spokesman behaviours by all of the deans during the observation periods considered in this study were 2%, 10% and 6% (Spring, Fall, and the two periods combined, respectively). Deans 1, 2, and 4 all utilized more time for spokesman behaviours during the Fall (9%, 6%, and 19% respectively) than they did during the Spring (3%, 1%, and 2% respectively). Dean 3, for whom only Spring data are available, used 2.5% of her time in this fashion. Dean 5 used 2% of her time for spokesman behaviours during the Spring but none of her Fall time was required for this category of behaviours.

Decisional Behaviours

Decisional behaviours were those activities which involved the making of significant decisions and were subdivided into the categories of entrepreneur, disturbance handler, resource allocator, and negotiator. Table 38 summarizes the data related to the decisional cluster of behaviours. The number of decisional behaviours in which the deans were engaged varied from 12 to 27 during the Spring observations and from 5 to 9, a much lower and narrower range, during the Fall. The average daily number of decisional behaviours varied from 4 to 9 in the Spring and from 1.6 to 3 during the Fall. The amount of time that the deans spent on this category of behaviours was between 165 minutes and 461 minutes in the Spring and between 35 minutes and 180 minutes in the Fall. The average duration of decisional behaviours during the Spring was in a range which extended from 9.7 minutes to 24 minutes. During the Fall, the range for the average duration of decisional behaviours was from 7 minutes to 22.5 minutes. The means for the percentage of time spent by the deans on decisional behaviours during the Spring,

Table 38

Summary: The Deans' Decisional Behaviours
by Amount of Time and Number of Activities

Decisional Behaviours	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of decisional behaviours	27	9	36	17	5	22	14			20	7	27	12	8	20
Average number of decisional behaviours per day	9	3	6	5.6	1.6	3.6	4.6			6.6	2.3	4.5	4	2.6	3.3
Time* spent on decisional behaviours	461	169	629	165	35	200	199			457	68	525	291	180	471
Average duration of each decisional behaviour	17	19	18	9.7	7	8	14			23	10	16.5	24	22.5	23

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observational data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

Fall, and two observational periods combined were 19%, 6% and 12.5% respectively. In all cases, as shown in Figure 52, the percentage of time used for decisional behaviours declined in the Fall as opposed to the Spring: Dean 1 went from 28% to 9%; Dean 2 went from 8% to 2%; Dean 4 went from 27% to 3% and Dean 5 went from 23% to 13%. Dean 3, for whom only Spring data are available, used 13% of her time for decisional behaviours.

Entrepreneur Behaviours. Table 39 provides a summary of the deans' entrepreneur behaviours. Only two deans were engaged in entrepreneur behaviours during the Spring. Both devoted 3 activity units to this category of behaviour. During the Fall, one of the deans devoted 1 activity unit to this category of behaviour and two others each devoted 2 activity units to entrepreneur behaviours. The daily average for the number of entrepreneur activities was 1 for each of the two deans during the Spring and 0.3 and 0.6 for the three deans in the Fall. During the Spring one of the deans spent 128 minutes on entrepreneur behaviours and the other spent 260 minutes. During the Fall, two of the deans spent 25 minutes each on this type of activity and one dean spent 116 minutes. The two deans had average durations for their entrepreneur behaviours of 43 minutes and 87 minutes during the Spring. The three deans who were engaged in entrepreneur behaviours during the Fall had average durations for each activity in this category of 20 minutes, 13 minutes and 58 minutes. As shown in Figure 53, the collective means for the percentage of time spent by all of the deans on this category of behaviour were 5% for Spring, 2% for Fall, and 3.5% for the two periods combined. Dean 1 was occupied by entrepreneur behaviours

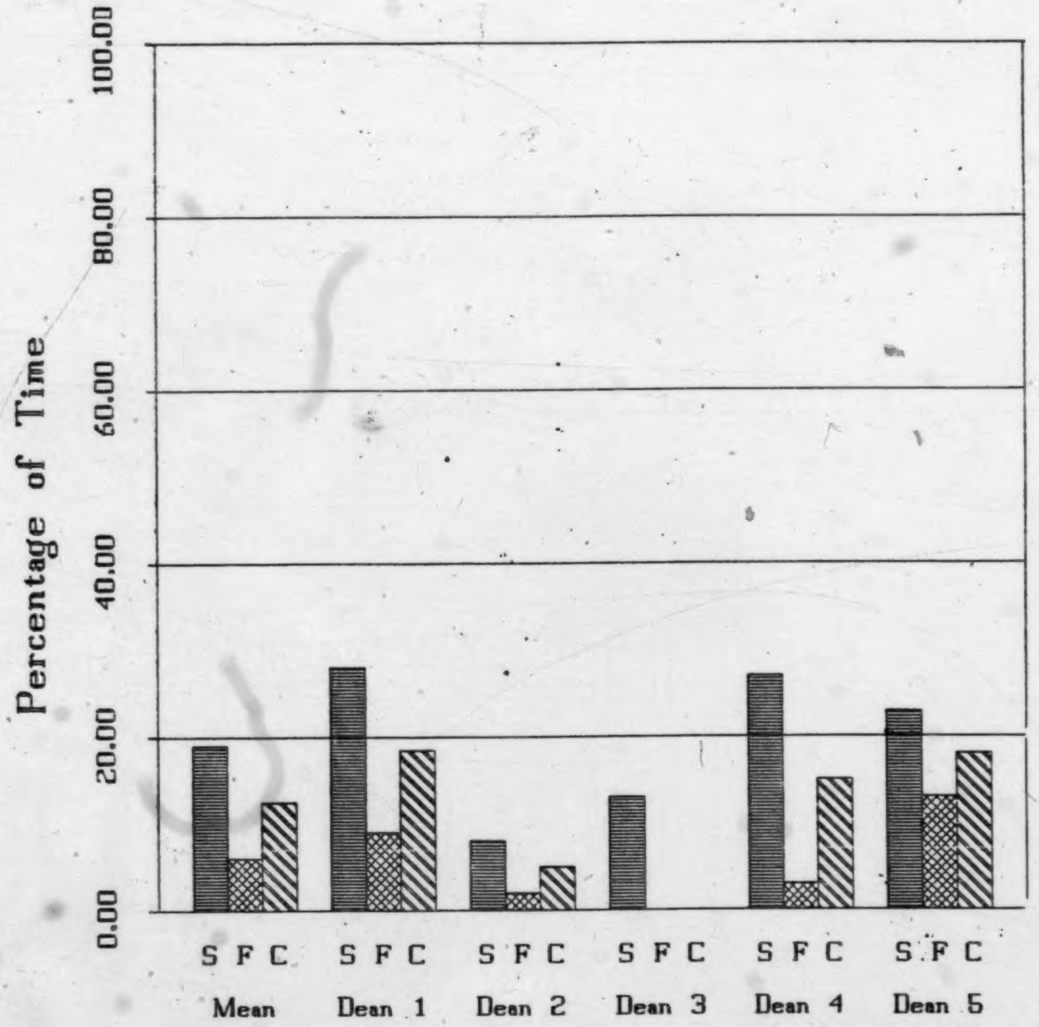

Figure 52 Decisional Behaviours by Time

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Table 39

Summary: The Deans' Entrepreneur Behaviours
by Amount of Time and Number of Activities

Entrepreneur Behaviours	Dean 1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of entrepreneur behaviours	3	1	4	0	2	2	0			3	0	3	0	2	2
Average number of entrepreneur behaviours per day	1	.3	.6	0	.6	.3	0			1	0	.5	0	.6	.3
Time* spent on entrepreneur behaviours	128	20	148	0	25	25	0			260	0	260	0	116	116
Average duration of each entrepreneur behaviour	43	20	31.5	0	13	13	0			87	0	87	0	58	58

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observational data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

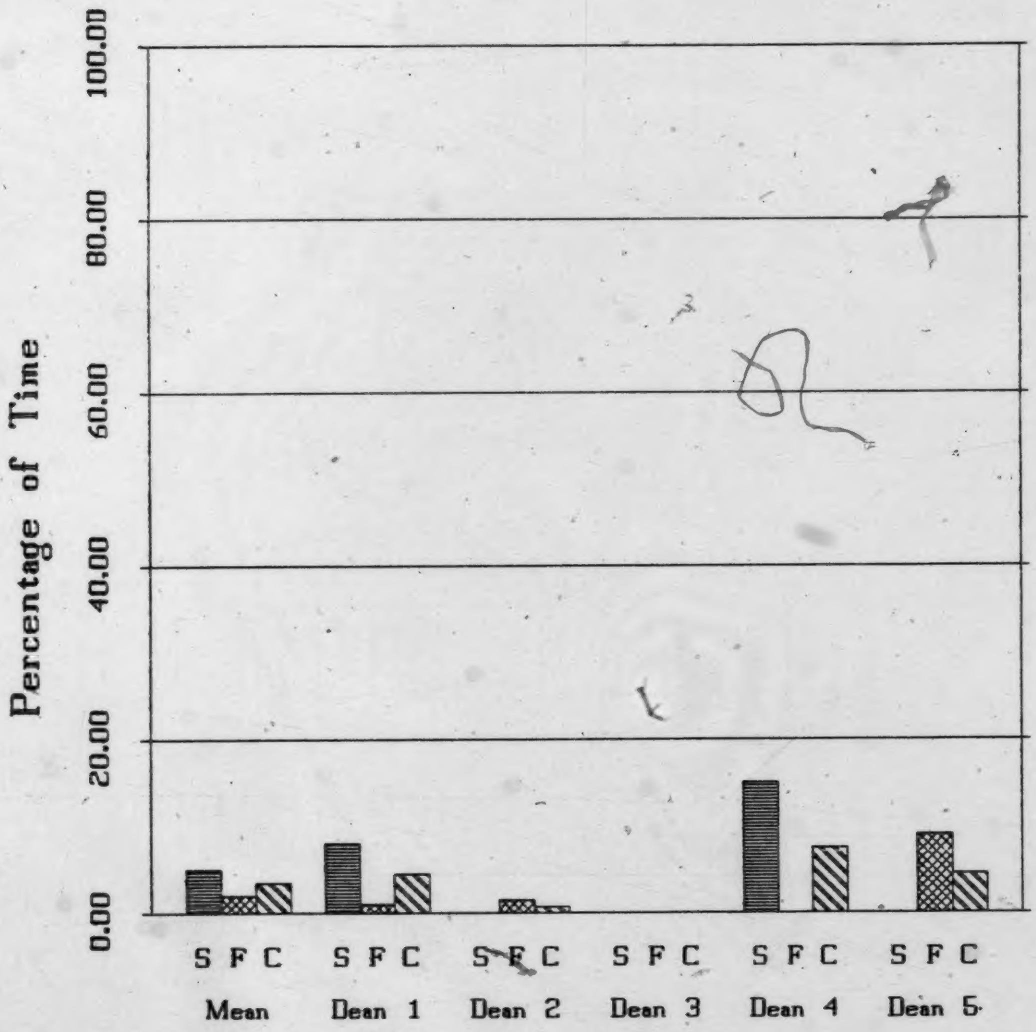

Figure 53 Entrepreneur Behaviours by Time

for 8% of her time in the Spring, and for 1% of her time in the Fall. Deans 2 and 5 did not utilize any of their time for entrepreneur behaviours in the Spring but utilized 1.5% and 9% respectively in the Fall. Dean 4 spent 15% of her Spring working time on entrepreneur behaviours but none of her Fall working time. Dean 3 spent no time, during the only period in which she was observed, on this type of behaviour.

Disturbance Handler Behaviours. Table 40 summarizes the deans' disturbance handler behaviours. During the Spring, the number of disturbance handler behaviours ranged from 1 to 8 while the Fall disturbance handler behaviours varied from 1 to 4 with one of the deans not displaying any behaviours of this sort. The daily average for this category of behaviour was 0.3 to 1.6 during the Spring and 0.3 to 1.3 during the Fall. The time spent on disturbance handler behaviours was from 6 minutes to 272 minutes during the Spring observation period and from 18 minutes to 59 minutes in the Fall observation period. The average duration of this type of behaviour varied from 3 minutes to 34 minutes in the Spring and from 15 minutes to 18 minutes during the Fall. Figure 54 shows that the means for the time spent by all of the deans on disturbance handler behaviours was 5% in the Spring, 1% in the Fall, and 3% for the two periods combined. Dean 1 was occupied with disturbance handler behaviours for 0.5% of her time during the Spring and for 1% of her time during the Fall. Dean 2 spent 2% of her Spring working time on this category of behaviour but none of her Fall working time. During the Spring, the only time for which there are data available, Dean 3 spent 4% of her time on disturbance handler behaviours. Deans 4 and 5

Table 40

Summary: The Deans' Disturbance Handler Behaviours by Amount of Time and Number of Activities

Disturbance Handler Behaviours	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of disturbance handler behaviours	2	1	3	3	0	3	1			7	2	9	8	4	12
Average number of disturbance handler behaviours per day	.6	.3	.5	1	0	.5	.3			2.3	.6	1.5	2.6	1.3	2
Time* spent on disturbance handler behaviours	6	18	24	48	0	48	62			59	30	89	272	59	331
Average duration of each disturbance handler behaviour	3	18	10.5	16	0	16	21			8	15	11.5	34	15	24.5

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observational data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

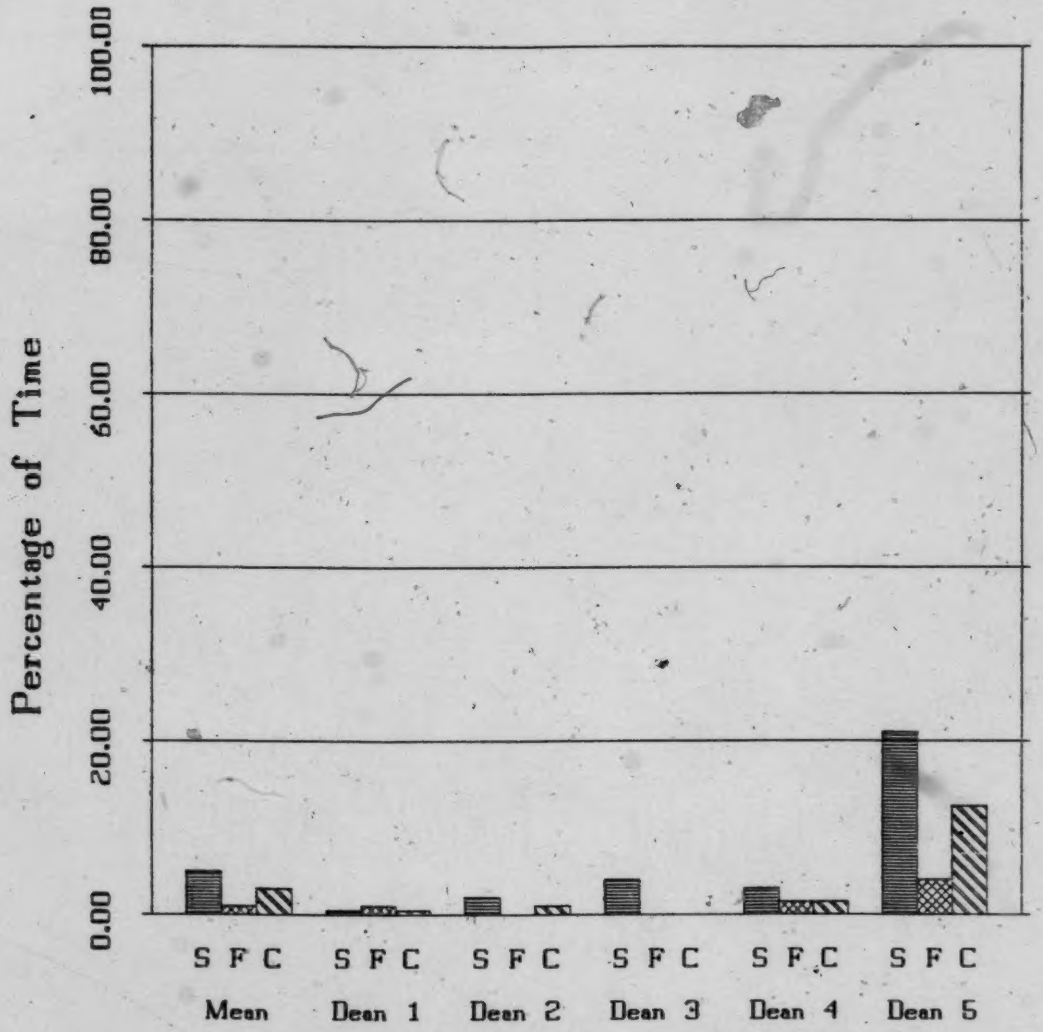

Figure 54 Disturbance Handler Behaviours by Time

spent 3% and 21% respectively of their Spring time in this type of behaviour and 1.5% and 4% respectively of their Fall time.

Resource Allocator Behaviours. The number of resource allocator behaviours used by the deans was between 3 and 17 during the Spring and between 2 and 7 during the Fall, as shown in Table 41. The range for the daily average for resource allocator behaviours was 1 to 5.6 during the Spring observation period and 0.6 to 2.3 during the Fall. The deans spent between 15 minutes and 293 minutes on this type of behaviour during the Spring and between 5 minutes and 131 minutes during the Fall. The resource allocator behaviours averaged durations from 5 minutes to 17 minutes during the Spring observations and from 2.5 minutes to 19 minutes during the Fall. Figure 55 demonstrates the percentage of time that the deans devoted to resource allocator behaviours. The means for the Spring, Fall and two periods combined were 7%, 3% and 5% respectively. In all cases where there are two complete sets of observations, the deans decreased the amount of time spent in this category of behaviour during the Fall observation period as opposed to the Spring. Dean 1 was observed to devote 18% of her Spring working time to resource allocator behaviours and 7% of her Fall working time. Dean 2 decreased the proportion of time she spent on resource allocator behaviours from 6% in the Spring to 0.5% in the Fall. Dean 3, as indicated previously, was only available during the Spring and at that time she used 3% of her time for resource allocator behaviours. Deans 4 and 5 used 5% and 1% of their time for resource allocator behaviours in the Spring and 1% and 0.03% of their time for this purpose in the Fall.

Negotiator Behaviours. The data related to the category which

Table 41

Summary: The Deans' Resource Allocator Behaviours
by Amount of Time and Number of Activities

Resource Allocator Behaviours	Dean 1			Dean 2			Dean 3**			Dean 4			Dean 5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of resource allocator behaviours	17	7	24	14	3	17	6			6	5	11	3	2	5
Average number of resource allocator behaviours per day	5.6	2.3	4	4.6	1	2.8	2			2	1.6	1.8	1	.6	.8
Time* spent on resource allocator behaviours	293	131	424	117	10	127	47			81	38	119	15	5	20
Average duration of each resource allocator behaviour	17	19	18	8	3.3	5.6	8			14	8	11	5	2.5	3.75

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observational data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

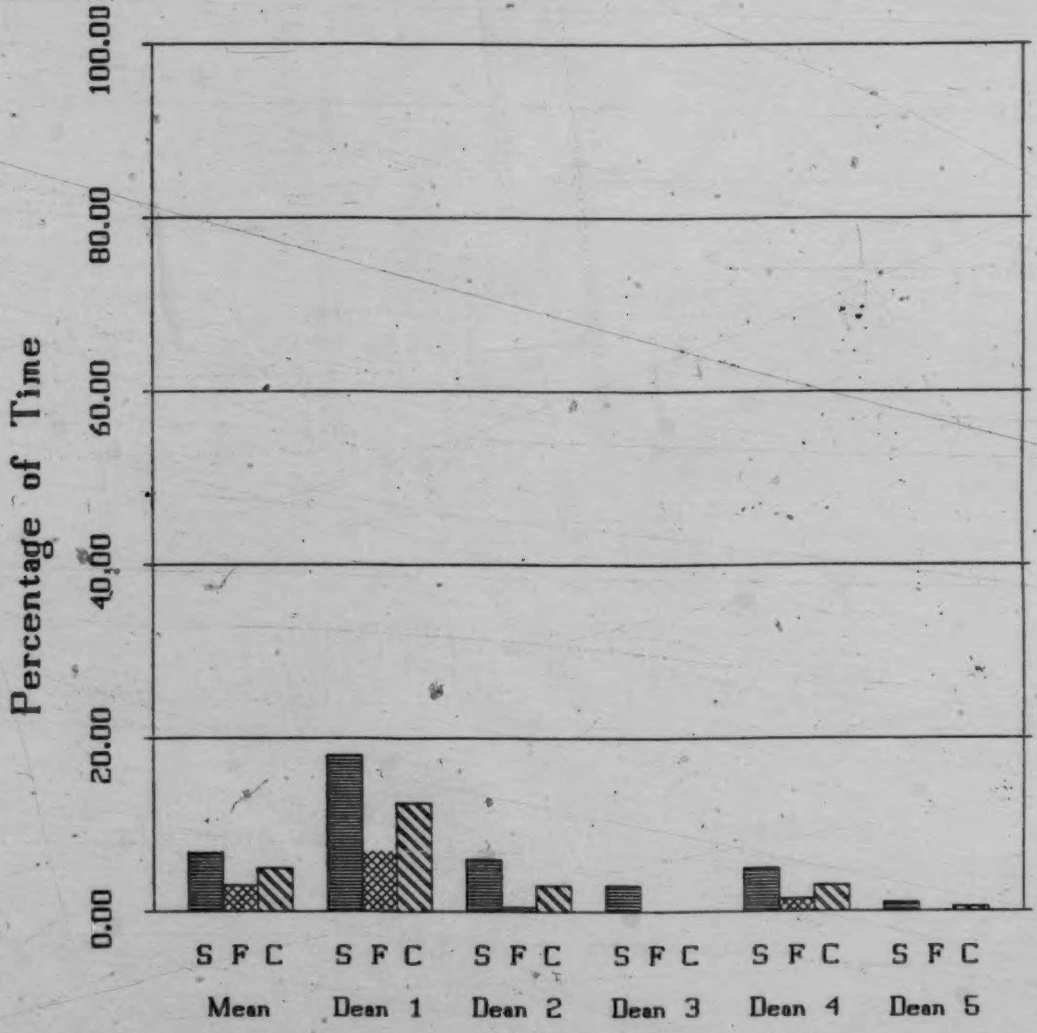

Figure 55 Resource Allocator Behaviours by Time

considers negotiator behaviours are contained in Table 42. Four of the deans were observed to engage in negotiator behaviours during the Spring period. Among those four deans the number of negotiator behaviours ranged from 1 to 7 in the Spring. None of the deans were observed to engage in any negotiator behaviours during the Fall. The average number of negotiator behaviours per day during the Spring observations varied between 0.3 and 2.3. The time spent by the deans on this category of activity during the Spring was between 14 minutes and 90 minutes, and the negotiator behaviours had average durations, during the Spring, from 6 minutes to 14 minutes. Figure 56 illustrates the proportions of time that the deans devoted to negotiator behaviours. The means for the Spring, and combined periods were 2% and 1% respectively. There is no mean shown for the Fall period since none of the deans engaged in negotiator behaviours during that observational period. During the Spring observation period, Dean 1 spent 2% of her time in negotiator behaviours, Dean 3 spent 6%, Dean 4 spent 4% and Dean 5 spent 1%. Dean 2 did not allocate any of her time during either observation period to negotiator behaviours.

Scholarship Behaviours

This cluster of activities was characterized as being learned academic endeavours and was found, in this study, to be comprised of the categories of teacher, researcher, and author behaviours. As shown in Table 43 which summarizes the deans' scholarship behaviours, the number of times that scholarship behaviours were conducted ranged between 6 and 27 during the Spring and between 7 and 21 during the Fall. The average daily number of scholarship behaviours during the Spring was between 2

Table 42

Summary: The Deans' Negotiator Behaviours
by Amount of Time and Number of Activities

Negotiator Behaviours	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of negotiator behaviours	5	0	5	0	0	0	7			4	0	4	1	0	1
Average number of negotiator behaviours per day	1.6	0	.8	0	0	0	2.3			1.3	0	.6	.3	0	.15
Time* spent on negotiator behaviours	32	0	32	0	0	0	90			57	0	57	14	0	14
Average duration of each negotiator behaviour	6	0	6	0	0	0	13			14	0	14	14	0	14

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observational data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

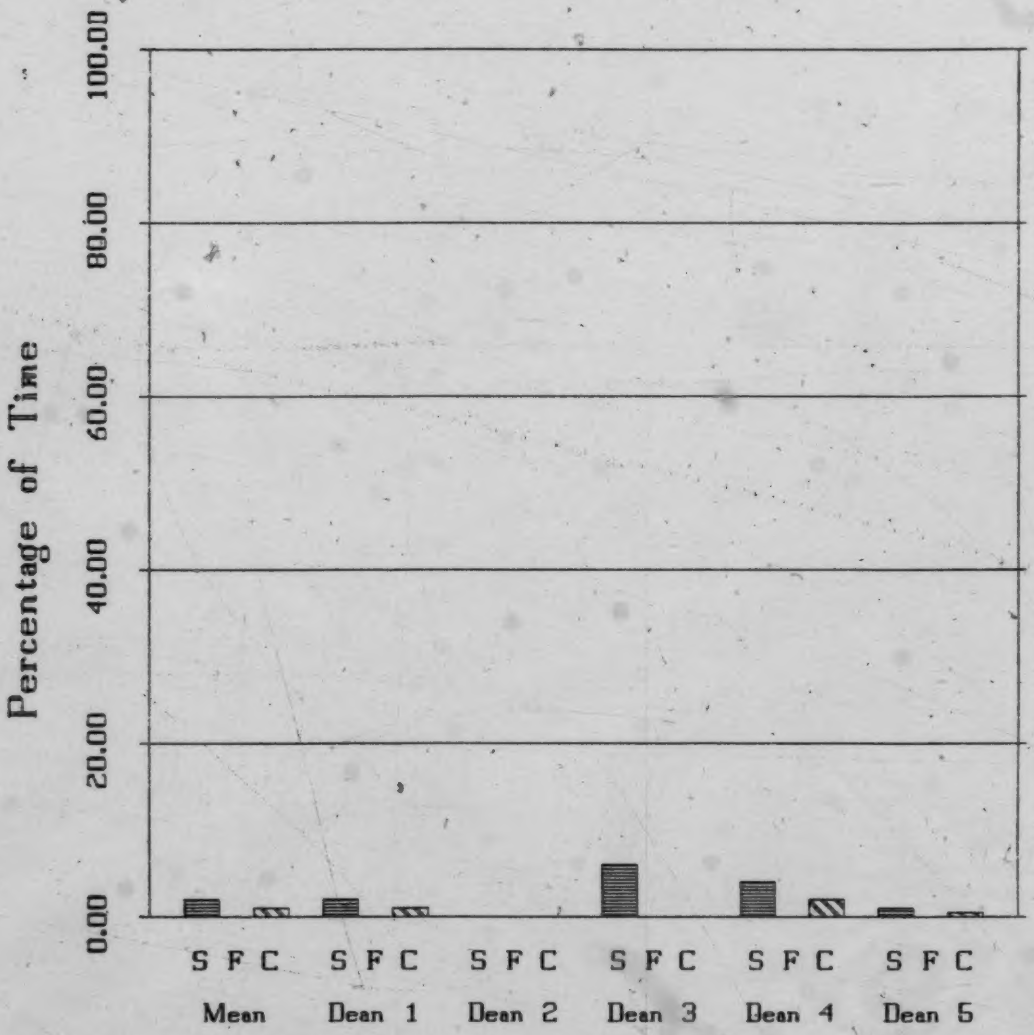

Figure 56 Negotiator Behaviours by Time

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Table 43

Summary: The Deans' Scholarship Behaviours
by Amount of Time and Number of Activities

Scholarship Behaviours	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of scholarship behaviours	27	18	45	7	21	28	16			6	11	17	6	7	13
Average number of scholarship behaviours per day	9	6	7.5	2.3	7	4.6	5.3			2	3.6	2.8	2	2.3	2.1
Time* spent on scholarship behaviours	377	404	782	390	464	854	507			320	449	769	154	72	226
Average duration of each scholarship behaviour	14	22	18	56	22	39	32			53	41	47	26	10	18

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observational data.
C Both Spring and Fall observational data combined.
** Only Sprimg data available.

and 9 whereas, during the Fall, the range narrowed to between 2.3 and 7. The deans allocated from 154 minutes to 507 minutes to this type of behaviour during the Spring and from 72 minutes to 464 minutes during the Fall. The average duration of a scholarship behaviour was between 14 minutes and 56 minutes during the Spring and between 10 minutes and 41 minutes during the Fall. The graph in Figure 57 permits comparisons regarding scholarship behaviour between and among the deans. The means for the Spring and Fall observation periods were quite similar, 22% and 19% respectively, and resulted in a combined mean over the two observation periods of 10.5%. The greatest percentage of activity (34%) in this cluster of behaviours was observed during the Spring observation of Dean 3. Deans 1 and 5 were observed to decrease their commitments to this type of activity from Spring (23% and 12% respectively) to Fall (21% and 5% respectively). Deans 2 and 4 were found to increase the portion of time which they spent on scholarship behaviours during the Fall (26% and 20% respectively) as opposed to the Spring (20% and 19% respectively).

Teacher Behaviours. In Table 44, the teacher behaviours which the deans exhibited are summarized. The number of teacher behaviours in which the deans were observed to be engaged was between 1 and 14 during the Spring and between 2 and 17 during the Fall. The daily averages for the number of teacher behaviours was similar, ranging from 0.3 to 4.6 during the Spring and from 0.6 to 5.6 during the Fall. The amount of time spent on teacher behaviours was between 6 minutes and 412 minutes during the Spring and between 41 minutes and 411 minutes during the Fall. The average duration of teacher behaviour varied from 6 minutes

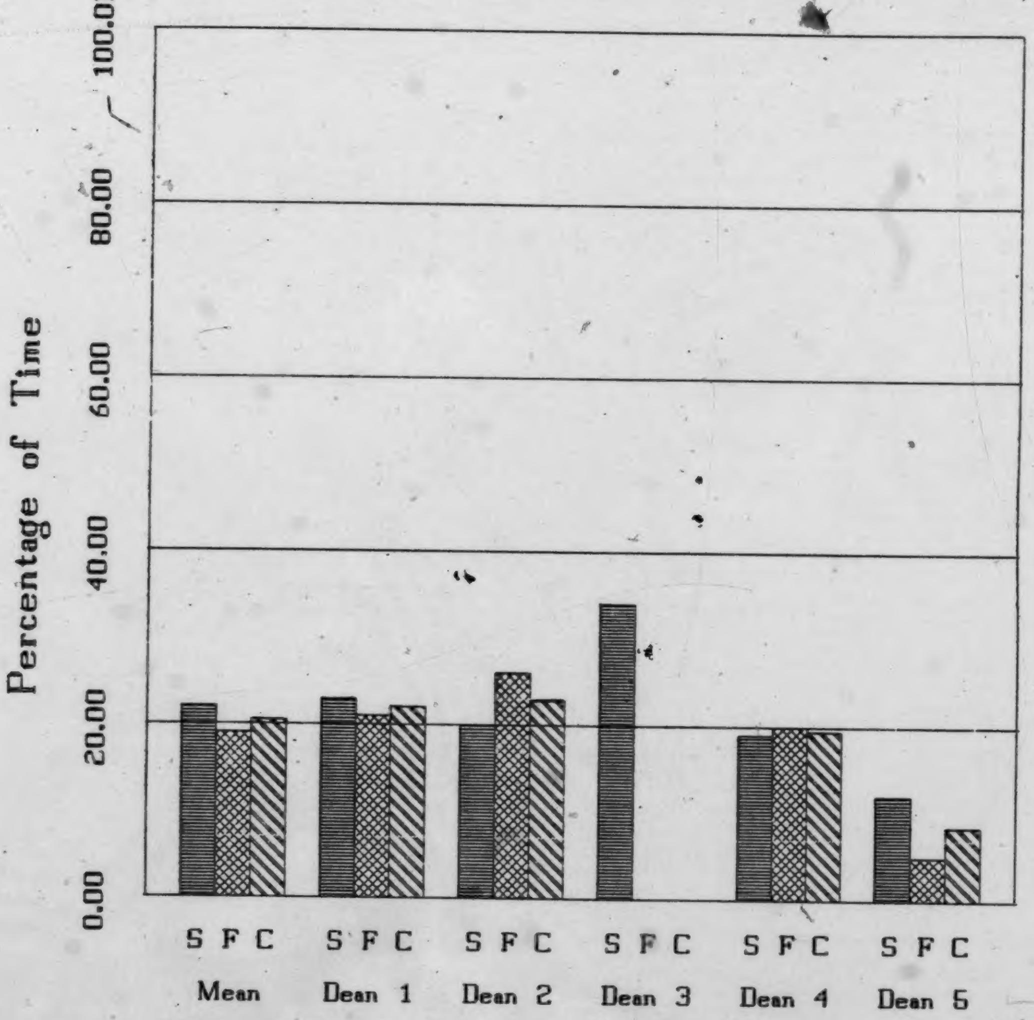

Figure 57 Scholarship Behaviours by Time

Graph Legend

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Table 44

Summary: The Deans' Teacher Behaviours
by Amount of Time and Number of Activities

Teacher Behaviours	Dean														
	1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of teacher behaviours	10	11	21	4	17	21	14			4	7	11	1	2	3
Average number of teacher behaviours per day	3.3	3.6	3.5	1.3	5.6	3.5	4.6			1.3	2.3	1.8	.3	.6	.5
Time* spent on teacher behaviours	157	361	518	197	405	603	412			166	411	577	6	41	47
Average duration of each teacher behaviour	16	33	24.5	49	24	36.5	29			42	59	50.5	6	21	14

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observational data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

to 42 minutes in the Spring observation period and from 21 minutes to 59 minutes during the Fall. The proportions of time that the deans devoted to teacher behaviours are illustrated in Figure 58. The Spring, Fall, and combined means for this category of behaviours were 12%, 17%, and 14.5% respectively. In all cases where there are data for both observation periods the deans increased the proportion of time spent on teacher behaviours during the Fall as compared to the Spring. During the Spring, Deans 1, 2, and 4 spent identical percentages of time on teacher behaviours (10%). This category of behaviour required 27% of Dean 3's Spring working time and 0.5% of Dean 5's. During the Fall, the percentage of teacher behaviours increased in all cases where there were data for both observation periods; Dean 1 increased to 19%, Dean 2 to 23%, Dean 4 to 18% and Dean 5 to 3%.

Researcher Behaviours. The number of researcher behaviours in which the deans engaged, as shown in the summary in Table 45, ranged from 2 to 6 during the Spring and from 4 to 7 during the Fall. The daily average for the number of researcher behaviours varied between 0.6 and 2 during the Spring and between 1.3 and 2.3 during the Fall. This category of behaviour required time commitments ranging from a low of 95 minutes to a high of 154 minutes during the Spring observations and from a low of 31 minutes to a high of 59 minutes during the Fall. The average duration of a researcher behaviour varied from 23 minutes to 77 minutes during the Spring and from 6 minutes to 29 minutes during the Fall. The percentage of time that these figures represent are illustrated in Figure 59. The Spring, Fall and combined means for the percentage of time devoted to this cateogry of behaviour by all of the

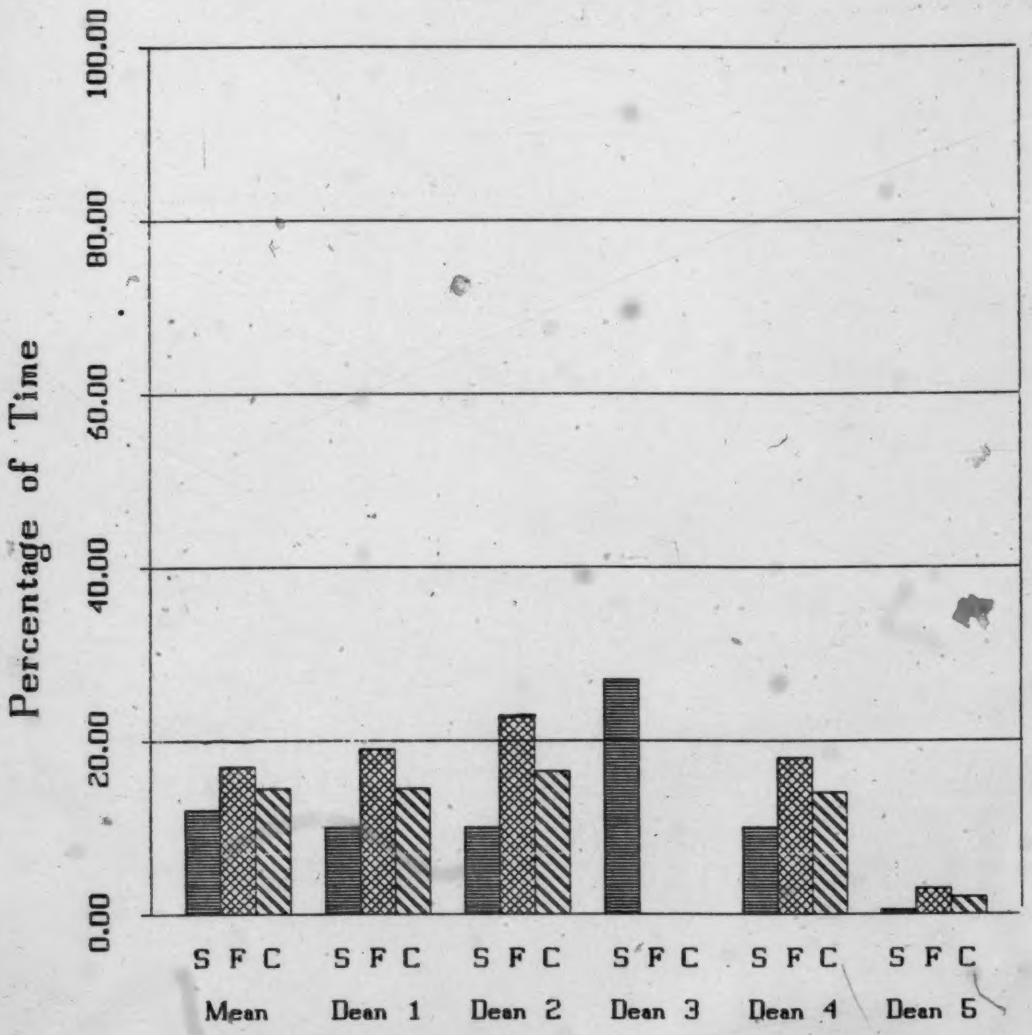


Figure 58 Teacher Behaviours by Time

Graph Legend

▤ S

▨ F

▧ C

Table 45

Summary: The Deans' Researcher Behaviours by Amount of Time and Number of Activities

Researcher Behaviours	Dean 1			2			3**			4			5		
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of researcher behaviours	6	7	13	2	4	6	2			2	4	6	5	4	9
Average number of researcher behaviours per day	2	2.3	2.1	.6	1.3	1	.6			.6	1.3	1	1.6	1.3	1.5
Time* spent on researcher behaviours	140	43	184	112	59	171	95			154	38	192	148	31	179
Average duration of each researcher behaviour	23	6	15	56	15	35.5	47.5			77	29	53	30	8	19

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observational data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

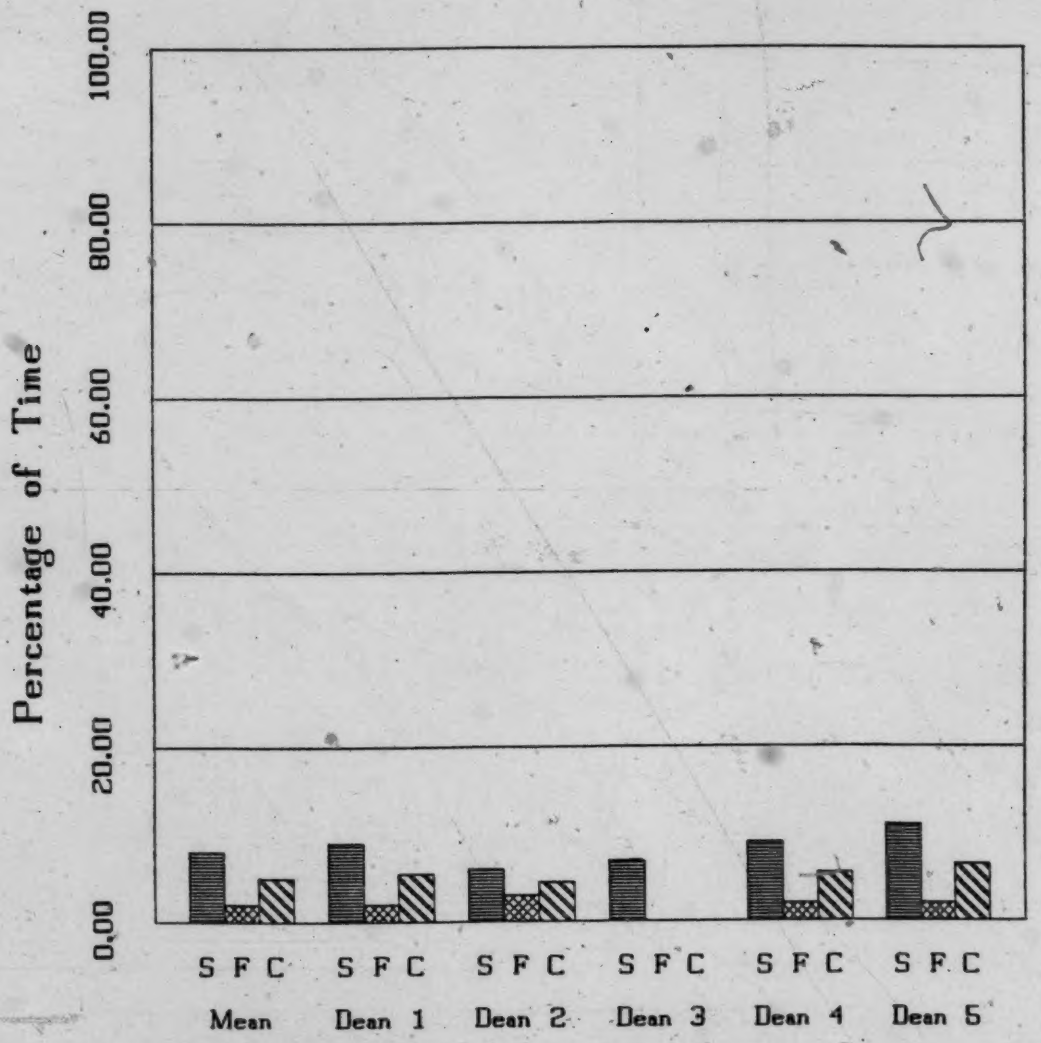


Figure 59 Researcher Behaviours by Time

Graph Legend

▤ S
▦ F
▧ C

were 8%, 2% and 5% respectively. Deans 1 and 4 utilized identical percentages of time on this category of behaviour for both Spring (9%) and Fall (2%). Research behaviours received 6% of Dean 2's time during the Spring and 3% during the Fall. Dean 5 spent 11% of her Spring working time on research behaviours and 2% of her Fall time. Dean 3, for whom only Spring data are available, used 7% of her time in this manner. In all cases for which there are two sets of observational data the deans decreased the percentage of time which they committed to this category of behaviours during the Fall as compared to the Spring.

Author Behaviours. During the two observation periods, as Table 46 shows, only two of the deans engaged in author behaviours during the Spring and none of the deans engaged in this sort of behaviour during the Fall. In the Spring, the two deans engaged in 11 author behaviours and 1 author behaviour each with resulting daily Spring averages of 3.6 and 0.3 author behaviours. They spent almost identical (80 and 81 minutes) total amounts of time on this category of behaviour but the average durations of their author behaviours were considerably different (7.2 minutes and 81 minutes). These figures are illustrated in Figure 60 as percentages of total time worked and represented 5% of Dean 1's Spring working time and 4% of Dean 2's. The mean percentage of time spent in this category of behaviour by all the deans during the Spring was 2%.

The Purposes of the Nursing Deans' Activities: Composite and Aggregate Summaries

Based on data in the preceding sections of this chapter, this section presents composite and aggregate summaries of the proportions of

Table 46

Summary: The Deans' Author Behaviours
by Amount of Time and Number of Activities

Author Behaviours	Dean														
	S	F	C	S	F	C	S	F	C	S	F	C	S	F	C
Number of author behaviours	11	0	11	1	0	1	0			0	0	0	0	0	0
Average number of author behaviours per day	3.6	0	1.8	.3	0	.15	0			0	0	0	0	0	0
Time* spent on author behaviours	80	0	80	81	0	81	0			0	0	0	0	0	0
Average duration of each author behaviour	7.2	0	7.2	81	0	81	0			0	0	0	0	0	0

* All times are in minutes and are rounded to the nearest minute.
S Spring observational data.
F Fall observational data.
C Both Spring and Fall observational data combined.
** Only Spring data available.

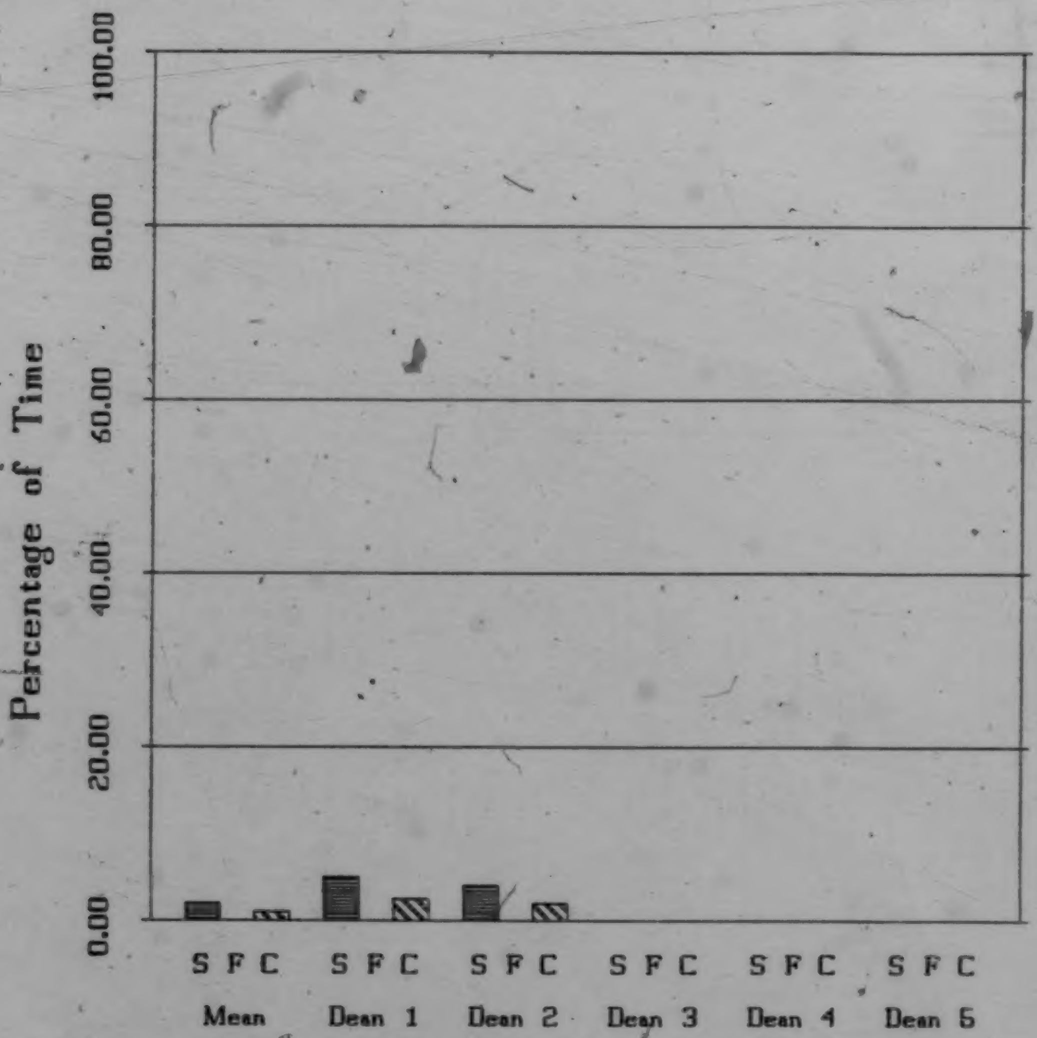
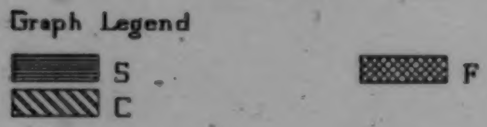


Figure 60 Author Behaviours by Time



time that the deans in the sample spent on each of the categories which classified activities according to the purpose for which those activities were performed. Table 47 summarizes the mean amount of time that all of the deans spent on each of the categories of behaviour during the Spring, Fall, and the two observation periods combined. These means were used to calculate both of the following composite summaries and the aggregate summary of the distribution of the subject deans' time among the categories of behaviour according to purpose. Figure 61 illustrates the distribution of time by the deans in the study among the purpose categories during the Spring. As the figure illustrates the deans allocated 29% of their time to interpersonal behaviours, 19% to informational behaviours, 19% to decisional behaviours, and 22% to scholarship behaviours during the Spring. The remainder of the deans' time was unclassified. Within the interpersonal cluster of behaviours 10% of the subject deans' time was allocated for figurehead behaviours, 10% for leader behaviours, and 9% for liaison behaviours. Among the informational cluster of behaviours monitor behaviours required 14%, disseminator behaviours required 3% and spokesman behaviours required 2% during the Spring. The distribution of time among the decisional cluster of behaviours was observed to be 5% for entrepreneur behaviours, 5% for disturbance handler behaviours, 7% for resource allocator behaviours, and 2% for negotiator behaviours. Within the scholarship cluster of behaviours, teacher behaviours received 12% of the deans' time during the Spring, researcher behaviours received 8% of Spring working time and author behaviours received 2%.

Table 47

Aggregate Mean Times* for the Categories of Purpose

Clusters and Categories of Behaviours	Observation Period		
	Spring	Fall	Combined
Interpersonal	466	600	533
Figurehead	173	187	180
Leader	154	134	144
Liaison	147	279	213
Informational	307	704	505.5
Monitor	230	434	332
Disseminator	53	94	73.5
Spokesman	27	177	102
Decisional	315	113	214
Entrepreneur	78	40	59
Disturbance Handler	89	27	58
Resource Allocator	111	46	78.5
Negotiator	39	0	19.5
Scholarship	350	347	348.5
Teacher	188	305	246.5
Researcher	130	43	86.5
Author	32	0	16

*All times are in minutes and are rounded to the nearest minute.

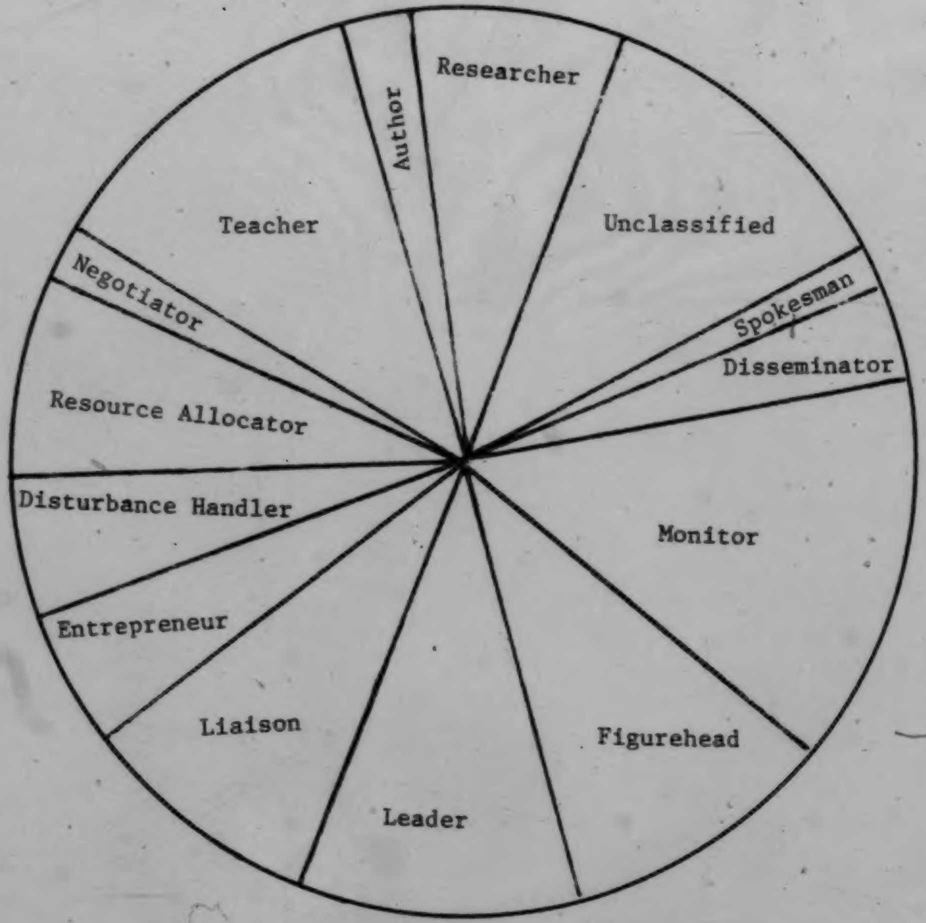


Figure 61

Distribution of the Nursing Deans' Time Among the Categories of Purpose During the Spring: A Composite

Figure 62 illustrates how the deans from this sample distributed their time during the Fall. The four clusters of behaviours received 33% of working time for interpersonal, 39% of working time for informational, 6% of working time for decisional and 19% of working time for scholarship. Within the interpersonal cluster, the distribution of time was 10% for figurehead behaviours, 8% for leader behaviours and 15% for liaison behaviours. Within the informational cluster, it was observed that 24% of the subject deans' time was used for monitor behaviours, 5% was used for disseminator behaviours, and 10% was used for spokesman behaviours. The entrepreneur behaviours of the decisional category received 2% of the deans' time during the Fall, while the disturbance handler and resource allocator received 1% and 3% respectively. The figure does not show any negotiator behaviours because none of the deans in the sample utilized any of their time in this fashion. During the Fall, teacher behaviours received 17% of the subject deans' time and researcher behaviours received 2%. No time was spent on author behaviours by any of the deans during the Fall.

The distribution of deans' time over the two periods of observation combined is illustrated in Figure 63. The interpersonal cluster of behaviours received 31% of the subject deans' aggregated time, informational behaviours required 29% of their time, decisional behviours 12.5% and scholarship behaviours 20.5%. Figurehead behaviours were observed to be allocated 10%, leader behaviours 9% and liaison behaviours 12% of the deans' aggregated time. Within the informational behaviours, 19.2% of the time of the deans in the sample was used for monitor behaviours, 4% for disseminator behaviours and 6% for spokesman

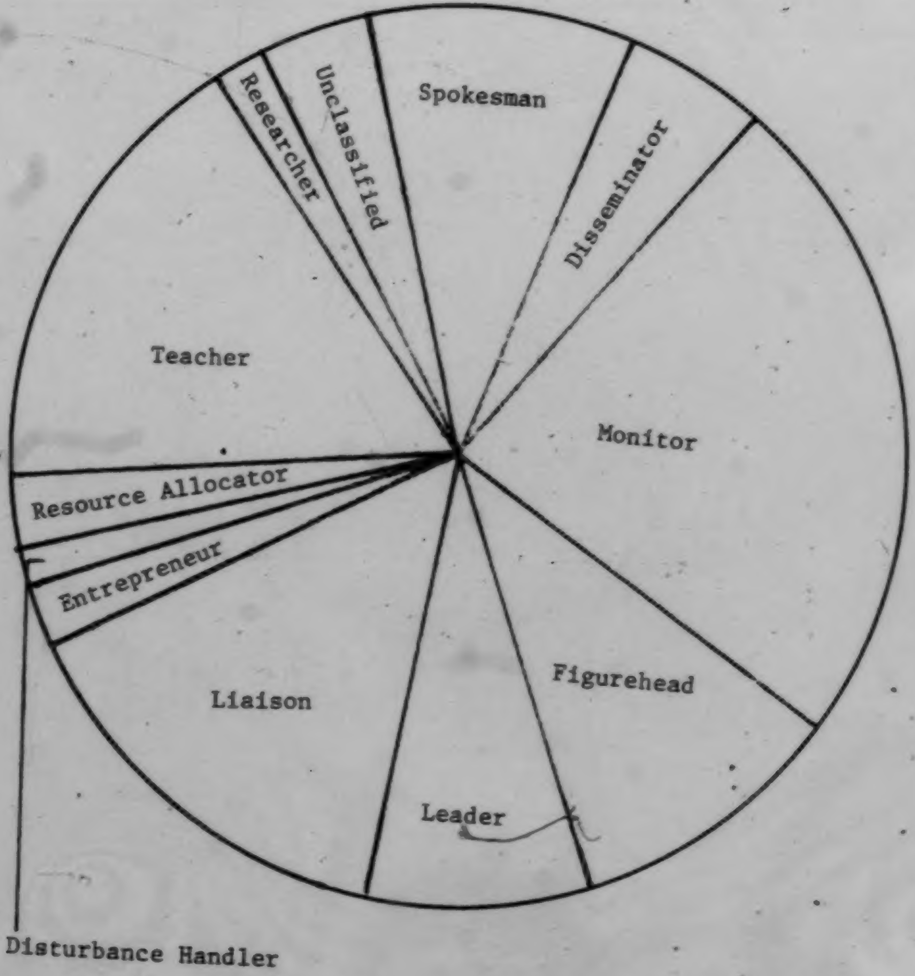


Figure 62

Distribution of the Nursing Deans' Time Among the Categories of Purpose During the Fall: A Composite

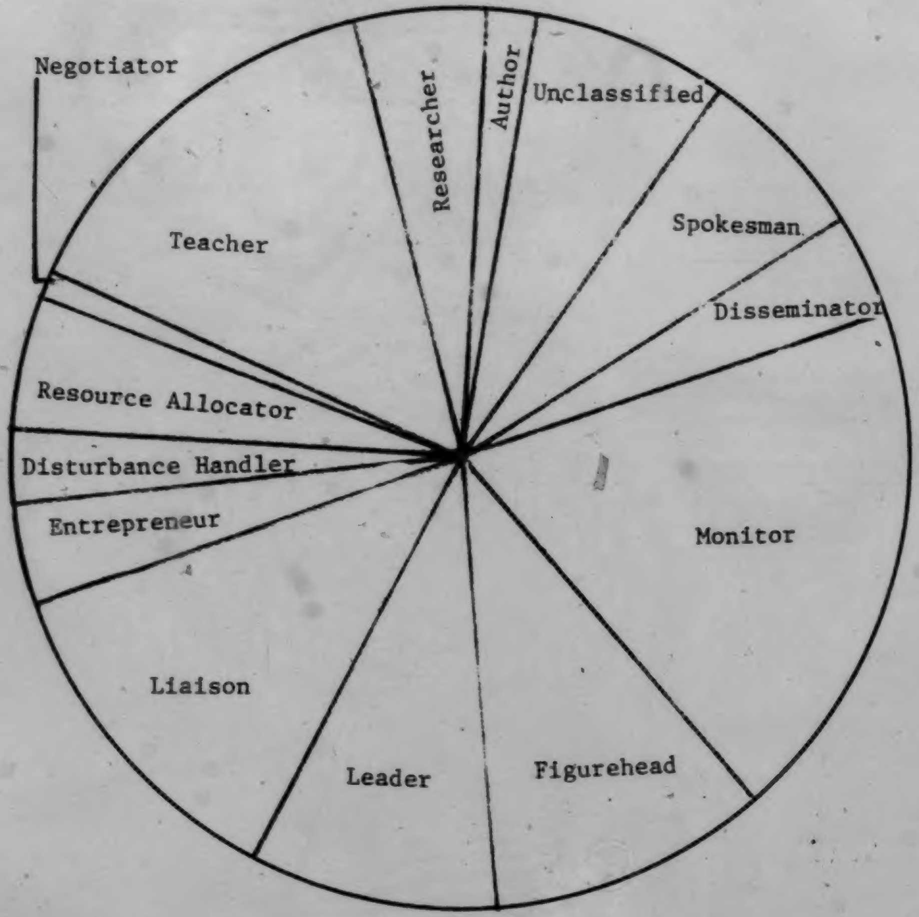


Figure 63

Distribution of the Nursing Deans' Time Among the Categories of Purpose Over Both Spring and Fall Observation Periods Combined: An Aggregate behaviours. The decisional behaviours of entrepreneur, disturbance handler, resource allocator and negotiator received 3.5%, 3%, 5% and 1% respectively. Time spent on scholarship behaviours was distributed among teacher, researcher and author behaviours as 14.5%, 5% and 1% respectively.

Chapter 6

DISCUSSION OF FINDINGS

The content of this chapter focuses on discussion of the findings in relation to the problem addressed in this study, i.e., the development of a description of the characteristics and purposes of the administrative work behaviours of deans of nursing. The content is structured around the following six areas of investigation which were used to guide this study:

1) the classification of observed administrative behaviours of Canadian deans of nursing;
2) the comparison of the administrative behaviours of deans of nursing as described in the literature with those administrative behaviours identified by structured observation;
3) the comparison of the administrative behaviours of Canadian deans of nursing with the administrative behaviours of chief executives as described by Mintzberg (1973);
4) the comparison of the administrative behaviours of Canadian deans of nursing with the administrative behaviours of school superintendents as described by Duignan (1979);
5) the formulation of propositions regarding the administrative behaviours of deans of nursing;
6) the generation of testable hypotheses regarding administrative behaviour relative to general administration theory.

Each of the four sections of the chapter addresses one or more of the areas of investigation. The first section reviews the three classification systems used in the study (area 1). Section two considers the comparison of the administrative behaviours of deans of nursing as described in the literature with those administrative behaviours identified in this study (area 2). Areas 3 and 4 are addressed together in the third section of this chapter. Section four presents propositions and hypotheses which relate to areas 5 and 6.

The Classification of the Observed Administrative Behaviours

Observations of all of the deans' activities during the working day were recorded according to accepted format for structured observation, i.e., duration, participants, location, purpose, format, and initiator of the activity. From these observations evolved the three classification systems used in this study, namely classification of activities by media used, by participants in the activity, and by purpose for which the activity was performed. The process by which these classifications, the categories within them, and the operational definitions for each were evolved is described in detail in Chapter 3. The first two classification systems, i.e., media and participants, were used to analyze low inference level data, whereas, the classification by purpose was used to analyze data of a higher inference level.

Administrative Behaviours of Deans of Nursing as Described in the Literature and as Identified in this Study

As the literature review in Chapter 2 demonstrated, there is a paucity of information about the administration of universities generally and an absolute dearth of information about the administration of university nursing education specifically. Descriptions of the administrative behaviours of deans of nursing were sought in the literature of the past 25 years. The results of this search were meager and are summarized in Table 48. As the table shows, only eight authors who had addressed the general area of the administrative behaviours of deans of nursing could be identified. Of the 20 functions of deans of nursing which these eight authors identified, not one function was agreed upon by all of the authors. Curriculum development generated agreement among five of the authors, the greatest number of all of the functions. Only three writers overtly identified decision making as a decanal function and three different writers agreed that budgeting was an administrative function of deans of nursing. All other functions in Table 48 received support from only one or two of the authors. In addition, these functions are all relatively broad and vaguely defined processes rather than tasks or activities.

This present study attempted to generate a description of the administrative behaviours of a dean of nursing. The structured observation of five Canadian Deans of Nursing generated the following list of thirteen behaviours in four clusters:

Interpersonal Behaviours
    Figurehead Behaviours
    Leader Behaviours
    Liaison Behaviours

Table 48

Functions of Deans of Nursing as Identified from the Literature

Functions	Schlotfeldt 1956	Gallagher 1965	Topalis 1969	Geiss 1969	Repp 1970	Palmer 1975	Armiger 1976	Higgs 1978
Planning		X	X					
Coordinating		X						
Evaluating		X						
Faculty Development		X	X					
Student Development		X	X					
Reporting		X						
Budgeting		X				X	X	
Policy Formation		X						
Communication		X	X					
Collaboration		X						
Directing		X						
Facilitating		X						
Curriculum Development			X	X		X	X	X
Professional Expression			X					
Individualized Functions			X					
Leadership							X	
Forecasting							X	
Community Relations							X	
Decision Making	X			X		X		
Spokesman						X		

Informational Behaviours
    Monitor Behaviours
    Disseminator Behaviours
    Spokesman Behaviours
Decisional Behaviours
    Entrepreneur Behaviours
    Disturbance Handler Behaviours
    Resource Allocator Behaviours
    Negotiator Behaviours
Scholarship Behaviours
    Teacher Behaviours
    Researcher Behaviours
    Author Behaviours

Operational definitions for each of the clusters and categories on the list of behaviours of deans of nursing are found in Chapter 3. This list of behaviours was used extensively in presenting findings related to the high level inference data in Chapter 5. The list above includes all of the behaviours observed during the present study and incorporates all of the functions presented in Table 48. Thus, the list of decanal behaviours generated in this study appears to provide categories for conceptualizing the work related behaviours of nursing deans that are more extensive, comprehensive and mutually exclusive than any previously available in the literature.

Comparison of the Administrative Behaviours of Three Different Types of Administrators

The purpose of this section of the chapter is to compare the administrative behaviours of Canadian deans of nursing with the administrative behaviours of chief executives (Mintzberg, 1968) and school superintendents (Duignan, 1979), i.e., the purpose of this section is to consider sub-problems 3 and 4 of this study. The administrative behaviours of the three different types of administrators will be discussed in the areas of work characteristics, participants in the administrators' activities, and the purpose of the activities. The data presented in this section were drawn from Mintzberg (1968 and 1973) and Duignan (1979) and from this present study.

Work Characteristics

Comparisons among the work characteristics of the chief executive, the superintendent of schools and the dean of nursing are presented in Table 49. The average length of the day for the chief executive and the school superintendent were very similar (8.08 hours and 8.2 hours respectively) but the average day for the dean of nursing was more than an hour longer (9.41 hours) than either of the other administrators. The average daily number of activities in which each administrator was engaged was very similar for the school superintendent and the dean of nursing (38 and 37 respectively) while the chief executive's average number of activities per day was considerably lower at 22. The durations of the activities in which the school superintendent and the dean of nursing were each engaged were more similar to each other (13 minutes and 16 minutes respectively) than either of them was to those of the chief executive (22 minutes).

The number of sessions of desk work required of the dean of nursing was greater (13) than that required of either chief executive

Table 49

Comparisons of the Work Characteristics of the Chief Executive, the School Superintendent, and the Dean of Nursing

Area of Comparison	Chief Executive (Mintzberg)	Superintendent (Duignan)	Dean of Nursing	
Average Hours Worked per Day	8.08	8.2	9.41	
Average Number of Activities per Day	22	38	37	
Average Length of Each Activity	22 minutes	13 minutes	16 minutes	
DESK WORK SESSIONS				
Average Number per Day	7	10	13	
Proportion of Working Time	22%	20%	27.9%	
Average Duration	15 minutes	10 minutes	12 minutes	
TELEPHONE CALLS				
Average Number per Day	5	11	8	
Proportion of Working Time	6%	11%	3.09%	
Average Duration	6 minutes	5 minutes	2.25 minutes	
SCHEDULED MEETINGS*				
Average Number per Day	4	3	4	
Proportion of Working Time	59%	31%	45.13%	
Average Duration	68 minutes	83 minutes	64 minutes	
UNSCHEDULED MEETINGS				
Average Number per Day	4	12	5	
Proportion of Working Time	10%	25%	9.98%	
Average Duration	12 minutes	10 minutes	11 minutes	
TOURS/VISITS/TRAVEL**	Tours/Visits	Tours/Visits/ Travel	Travel	Tours/ Visits
Average Number per Day	1	3	1.6	0
Proportion of Working Time	3%	13%	2.7%	0%
Average Duration	11 minutes	19 minutes	10 mins.	0

* These figures include evening meetings.

** Travel within the system is not reported by Mintzberg so this comparison may be somewhat misleading.

(7) or the school superintendent (10). Similarly the percentage of time which the dean of nursing devoted to this type of activity was greater (27.9%) than the percentage of time that the other two administrators spent on desk work (chief executive, 22%; school superintendent, 20%). However, the ranking of the three administrators changed when the average duration of desk work sessions was considered. The desk work sessions of the chief executive were shown to be of 15 minutes duration while those of the dean of nursing and the school superintendent were 12 minutes and 10 minutes, respectively.

The superintendent of schools was involved in an average of 11 telephone calls per day while the dean of nursing had 8 calls per day and the chief executive had only 5. The proportions of working time that these telephone calls required were 11% for the school superintendent, 3.09% for the dean of nursing, and 6% for the chief executive. The average duration of the chief executive's calls was the longest (6 minutes) and the nursing dean's was the shortest (2.25 minutes) with the school superintendent's calls lasting an average of 5 minutes. Thus, the chief executive, who had the fewest daily number of telephone calls, spent the greatest average amount of time on each call.

The chief executive and the dean of nursing participated in the same average number of scheduled meetings per day (4) while the school superintendent participated in one less. The percentages of time that each spent in these meetings were 59% for the chief executive, 31% for the school superintendent, and 45.13% for the dean of nursing. The average durations of the meetings attended by the chief executive and the dean of nursing were very similar (68 minutes and 64 minutes respectively), whereas, the average duration of the meetings attended by the superintendent of schools was much greater (83 minutes).

The average number of unscheduled meetings, like scheduled meetings, was very similar for the chief executive and the nursing dean (4 and 5 respectively), while the school superintendent exceeded them both considerably with an average of 12 unscheduled meetings per day. For the proportion of working time spent on this category of activity, the percentages of working time for the chief executive and the nursing dean were again virtually identical (10% and 9.98% respectively). The school superintendent spent 25% of his working time on unscheduled meetings. However, the average duration of unscheduled meetings was very similar for all three administrators (chief executive, 12 minutes; school superintendent, 10 minutes; nursing dean, 11 minutes).

Comparisons in the category Tours, Visits and Travel might be somewhat misleading since Mintzberg reports on only Tours and Visits, Duignan reports on Tours, Visits, and Travel, and this present study also reports on Tours and Visits with Travel reported separately. The chief executive was found to tour or visit once each day. This required 3% of his time and each lasted an average of 11 minutes. The dean of nursing, as opposed to the chief executive, did not undertake any tours or visits during the entire time of observation. The dean of nursing did however travel from one work location to another an average of 1.6 times each day. This activity required 2.7% of her working time and each such activity lasted for 10 minutes. When the travel category and the tour or visit category for the dean of nursing are combined the results can be compared with those of Duignan who reported on a category labelled Tours/Visits/Travel for the school superintendent. Thus, for a Tours/Visits/Travel category, the data for the dean of nursing would be 1.6 activities per day, 2.7% of her time, and an average duration of 10 minutes as opposed to the school superintendent for whom the data show 3 activities of this nature per day, using 13% of his time and averaging 19 minutes duration. The significant observations are that the dean of nursing spent no time on tours and visits and that she spent an amount of time on travel which is roughly equivalent to the time which the chief executive spent on tours and visits, and which is roughly half of the amount of time that the school superintendent spent on tours, visits, and travel.

The data presented in Table 50 permits comparison of the percentage of activities which lasted less than 9 minutes and those which lasted more than 60 minutes. As the table shows, the dean of nursing had the highest percentage of activities lasting less than 9 minutes and the median percentage of activities lasting longer than 60 minutes.

Table 50

Selected Comparisons Among the Durations of the Activities of the Chief Executive, the School Superintendent, and the Dean of Nursing

Duration of Activities	Chief Executive (Mintzberg)	School Superintendent (Duignan)	Dean of Nursing
Less than 9 minutes	49%	62%	73%
More than 60 minutes	10%	3%	7.6%

Thus, in comparison to the chief executive and the school superintendent, the dean of nursing worked a longer day, spent a larger percentage of time on a greater number of sessions of desk work, spent a greater proportion of time in scheduled meetings and had a higher percentage of activities lasting less than 9 minutes. Conversely, of the three administrators, the dean of nursing utilized the smallest proportion of time for telephone calls which were of the shortest duration, attended scheduled meetings which were of the shortest duration, spent no time on tours, and the least amount of time on travel, visits, and tours combined. In all other areas of comparison, the data for the dean of nursing were found to be the median between the data for the other two administrators, and, in fact, the data for all three administrators were remarkably similar in nearly all areas of comparison.

Participants in the Activities of the Administrators

Activities in which the administrators were in verbal contact with other people required 78% of the chief executive's working time, 69% of the school superintendent's working time, and 73% of the dean of nursing's working time. Table 51 presents these percentages as well as data which permits comparisons among the three administrators as to the average number of contacts per day and the average duration of each contact. The school superintendent had a higher number of verbal contacts (referred to as joint activities elsewhere in this study) than did the chief executive and the dean of nursing, both of whom had the same number. The average duration of the verbal contacts of the dean of nursing was higher than that of both the chief executive and the school superintendent.

Table 51

The Verbal Contacts of the Chief Executive, the School Superintendent and the Dean of Nursing

	Chief Executive (Mintzberg)	School Superintendent (Duignan)	Dean of Nursing
Average Number of Contacts per Day	15	26	15
Average Duration of Each Contact	26 minutes	13 minutes	27.6 minutes
Percentage of Working Time Spent on Verbal Contacts	78%	69%	73%

Data related to the categories of people that were involved in verbal contact (joint activities) with the three administrators is presented in Table 52. In the four categories of participants which were common to all three administrators, the dean of nursing, as compared to the other two administrators, spent the smallest percentage of time with superordinates, subordinates, and those classified as "other." In the percentage of time spent in contact with students, the dean of nursing far exceeded the school superintendent, but the percentage of time spent in contact with government was slightly greater for the school superintendent. Both the chief executive and the dean of nursing had contact with other institutions, the dean of nursing's percentage of time spent in this manner being much larger than that of the chief executive.

Table 52

Participants in the Administrative Activities of the Chief Executive, the School Superintendent, and the Dean of Nursing*

Category of Participant	Chief Executive	School Superintendent	Dean of Nursing
Superordinates.	7%	23.3%	1.5%
Subordinates	48%	56.9%	34.2%
Peers	11%	1.2%	15.75%
Students		0.4%	13.69%
Professional Associations			4.7%
Government		1%	0.27%
Other Institutions	5%		23.9%
Parents		6.4%	
Clients/Suppliers	20%		
Other	8%	10.4%	0.95%

* The percentages shown represent the proportion of the administrator's verbal contacts (the joint activities category in this study) which were spent with each of the categories listed in the table.

Purpose of the Administrators' Activities

As indicated earlier in the data analysis section of Chapter 3 (pp.69-73), when the individual, uniquely coded behavioural units were arranged into groups of activities having similar purposes, thirteen categories of administrative behaviours arose in four clusters from the data in this study. The first three clusters of ten categories were so similar to the managerial roles which Mintzberg (1973:58-94) proposed that his labels and definitions were adapted for use in this study. However, the investigator found, as did Duignan (1979:134) that:

> The use of the categories for the "purpose of the contacts" developed by Mintzberg restricted the researcher in drawing forth from the data the full richness of their meaning.

In fact, three categories of behavioural units comprising an entire cluster of the nursing deans' work behaviours was excluded when only Mintzberg's ten role categories were considered. Thus, Mintzberg's proposed roles for managers (administrators) were inadequate for thoroughly classifying the data which were gathered during the structured observation of deans of nursing. In order to completely classify all of these data according to purpose an entire additional cluster of categories of behaviours was required. This cluster was labelled scholarly behaviours and the categories of behaviours within it were labelled teacher behaviours, researcher behaviours, and author behaviours.

Table 53 presents data which permit limited comparison among the three administrators according to the purposes for which activities were performed. These comparisons are presented solely for interest due to

Table 53

Comparison of the Percentage of Time* Spent by the Chief Executive, the School Superintendent, and the Dean of Nursing on Behaviours Clustered According to Purpose

Purpose	Chief Executive (Mintzberg)	School Superintendent (Duignan)	Dean of Nursing
Informational	40%	39%	29%
Decisional	21%	35%	12.5%
Secondary	20%	11%	
Interpersonal			31%
Scholarly			20.5%

* Mintzberg and Duignan report time for the purposes as a percentage of verbal contacts. In this study, purposes and the time for each were considered on the basis of the deans' total working time.

the fact that Mintzberg and Duignan considered the purpose of verbal contacts only whereas this present study considered the purpose of all activity. They also calculated the time spent on each purpose as a percentage of the amount of time spent on verbal contacts, while the present study calculated purpose as a percentage of total working time. Therefore, reliable and valid comparisons of the purposes for which the chief executive, the school superintendent, and the dean of nursing perform activities, are not possible.

Propositions Regarding the Administrative Behaviours of Deans of Nursing

The purpose in this section is to present propositions regarding the administrative behaviours of deans of nursing. These propositions are put forward with the aim of generating future discussion. By simply rewording the propositions, they could become the working hypotheses for future research studies. The propositions were based on the structured observations of five Canadian deans of nursing, on the structured interviews with the five deans, and on the descriptive data which was gathered during the study.

Proposition 1. The dean of nursing works long days which are filled with many activities of short duration and high intensity. These activities are characterized by frequent interruptions and fragmentation which require what one dean termed the "constant shifting of mental gears." The dean of nursing on average works 9.41 hours per day on 37 activities which last an average of 16 minutes each. One dean suggested that, for her at least, a consequence of the brief intense nature of her work has been a shorter but sharper span of attention and that her "mind begins to wander" and she becomes "bored and impatient" with meetings or people who "drag things out." Another consequence of this characteristic of the dean of nursing's work was expressed by one of the subjects as follows:

> Sometimes it interferes with my personal life. Up until now it's [her work] been chaotic in terms of having any time for myself. You feel guilty when you go to a play, but I'm determined that I'm going to that play because it's ridiculous not to go; for my mental health it's necessary. Work does cut into my plans. I plan to do something and somebody calls an evening meeting.

Several of the subjects tried to control the interruptions by reserving one day a week for activities which required longer periods of concentration; they make it widely known within their faculties that on a specific day of the week they do not accept appointments. However, this plan breaks down when the president or vice-president calls a meeting or summons the dean to an appointment. As one dean put it, "you can't tell your boss that he is interfering with a day that you have set aside for a project of your own."

Proposition 2. The dean of nursing demonstrated a definite predilection for joint activities and their accompanying "real time" communications which imparted current information and instantaneous feedback. Over 27 days of observation, the mean amount of time that all of the deans in the study spent on joint activities was 73% which represented a mean of 2528 minutes of the deans' composite working time over a six day period of time. During this amount of time the dean of nursing typically conducted 105 different activities resulting in an average duration for each activity of 24 minutes. Of the time spent on joint activities, over two-thirds was spent with people from within the dean's own institution, and the majority of those contacts were with the dean's own administrative subordinates (25% of the dean's entire working time). Over a 6 day observation period the deans spent 934 minutes out of 3446 minutes of working time on desk work which was the only activity in which information was documented and which was the only solitary activity. All other time was spent in joint activities which involved oral undocumented information.

Proposition 3. Definite seasonal variations exist in the administrative behaviours of deans of nursing. The same characteristics, participants, and purposes are present in both Spring and Fall observations of decanal behaviour, but variations occur in the proportions of time and activity that each category within these three classifications receives. The dean's working day was longer in the Fall than in the Spring but the average number of activities was the same for both periods. The average duration of each activity was observed to differ by only 1 minute. The amount of time spent on desk work was greater in the Fall as were the amounts of time spent on travel and scheduled meetings; however, telephone calls required more time in the Spring. All other characteristics of the administrative work of deans of nursing remained the same during the two observation periods. Consideration of the participants in the dean's activities reveals that more time is spent on solitary activities during the Fall than in the Spring, the reverse is true, as would be expected, for the joint activities. Almost all of the decline in the amount of time spent on joint activities during the Fall, as opposed to the Spring, is accounted for by the decline in the amount of contact with subordinates and with representatives of other institutions. With regard to the purpose for which activities were performed, seasonal variations again were evident, particularly for informational behaviours and decisional behaviours. Informational behaviours doubled in the amount of time that they required during the Fall as opposed to the Spring, and decisional behaviours required only one-third the amount of time during the Fall than they had during the Spring. Interpersonal behaviours were relatively consistent from Spring to Fall as were scholarly behaviours. However, within scholarly behaviours it is interesting to note the increase in teacher behaviours during the Fall and the corresponding decline in researcher and author behaviours. Similarly, desk work, teacher behaviours and contact with students all show an increase in the Fall over the Spring.

Proposition 4. Much of the time spent by the dean of nursing on leadership behaviour was used for faculty development. One dean spent 27 minutes of a one hour meeting explaining to her faculty the budgeting process within the university. Another dean spent a large portion of a meeting explaining to her faculty the process for curriculum revision within their particular university. A third dean spent one hour explaining and interpreting the concept of collegial governance to her faculty. On several occasions the deans acted as mentors for faculty members who were attempting to make career decisions such as undertaking further graduate studies, selection of an appropriate doctoral programme, or the development of a research project. This is not to imply that other aspects of leadership behaviour were either neglected or ignored, rather that they were performed as expected while faculty development received an emphasis which had not previously been found in the literature.

Proposition 5. Deans of nursing make relatively few unaided decisions related to the Faculty of Nursing. Resource allocation behaviours were greater in the Spring, when annual budgets were being prepared, students were being admitted for the coming year, and faculty work load assignments for the coming year were being determined. But even in the Spring resource allocator behaviours only required 7% of the dean's working time and in the Fall this was only 3%. Similarly, negotiator behaviours were higher in the Spring when negotiations were held regarding contracts for clinical facilities for student practica during the coming academic year and regarding contracts for new and returning faculty. No negotiator behaviours were observed during the Fall. Also, disturbance handler behaviours were more frequent during the Spring when appeals (or threats of appeals) were launched by students who were dissatisfied with grades or by faculty members who were denied tenure or whose contracts were not renewed. Likewise entrepreneur behaviours were greater in the Spring when planning for new courses or programmes was underway. However, collectively these four categories within the decisional cluster of behaviours only required 19% of the dean of nursing's time during the Spring and 6% of her time during the Fall. Even these decisions were not made unaided. Because of the collegial governance system in Canadian universities, the dean of nursing is advised by a committee of faculty members about virtually every decision which is of any consequence at all to the Faculty of Nursing.

Proposition 6. Much of the entrepreneurial activity of the dean of nursing involves finding or generating alternative sources of funding to expand the Faculty of Nursing budget. Faculties of Nursing in this sample were generally dependent on the global budget allocated by the university to each of its academic units. There is reason to believe that this is true of all Faculties of Nursing in Canada. Rarely do they have continuing sources of funding within their budgets which can be used for research equipment or special programmes. When a Faculty of Nursing wishes to develop a new programme of either an educational or a service nature, the dean of nursing must identify sources of funding. These may take the form of research grants, grants from foundations, or corporate or private donations. Whatever the source, the additional funds must be solicited and secured or else the new programme does not go forward. At this particular time of financial retrenchment and declining enrolments in universities, this type of entrepreneur behaviour seems to be of particular relevance because most Faculties of Nursing seem to be experiencing an increasing number of applicants to their undergraduate programmes, both generic and Post-R.N. baccalaureate, and an increasing pressure to develop or expand graduate programmes. This modest growth trend in Faculties of Nursing is contrary to the general trend of retrenchment in the universities and therefore requires that a considerable portion of the entrepreneur behaviours of the dean of nursing be devoted towards locating alternative sources of funding for the budget. This emphasis within the entrepreneur behaviours on the locating, or soliciting of alternative sources of budgetary funds is not mentioned in any of the literature which was reviewed. In fact the literature seems to imply that the major activity within the entrepreneur behaviours would be associated with curriculum development. This may be another of the factors which is reflective of changing trends in higher education.

Proposition 7. Currently, the dean of nursing seems to be focusing on short-range planning rather than long-range planning. The declining enrolments, budget constraints, and fiscal retrenchment which many universities are currently experiencing are forcing short-range planning and inhibiting long-range planning. As one Dean stated:

> It's difficult to plan for the future with so much uncertainty regarding the continuation of programmes and what might happen with enrolment. So, all we can do is plan for the current budget year.

Proposition 8. Deans of nursing do not tour their domains as do the chief executive and school superintendent. This observation might be influenced by the concept of "academic freedom" which is revered by university faculty members. Perhaps this particular characteristic of administrative work is not found in university environments because the dean's dropping into a classroom unannounced and uninvited might be viewed as an invasion of academic freedom as well as being potentially disruptive to the educational enterprise by interfering with the rapport between faculty member and students or with the dynamics of interaction established by the faculty member. The absence of tours might also be related to the concept of university faculty members as a group of peers and colleagues who are all professional and function autonomously within their classrooms. However, deans of nursing appear to use other media to achieve the same purposes which executives and school superintendents accomplish using the tour media.

Proposition 9. Deans of nursing consciously commit themselves to scholarly behaviours. It may be that, in a university milieu, both the legitimate authority and the professional credibility of the individual are essential factors in establishing and maintaining the power and influence of the dean. Alternatively, it might be that since the decanal appointment is generally made for a limited term, that the dean feels the need to maintain her scholarly expertise in the event that the decanal appointment is not renewed. However, for these and possibly other reasons the dean of nursing deliberately chooses to incorporate into her job an entire cluster of behaviours which are extra to the managerial roles identified by Mintzberg (1973).

Proposition 10. The nursing dean, just as the school superintendent, is frequently in the position of being torn between the local interests of the Faculty of Nursing and the broader interests of the university as a whole. She frequently is in the position where she is called upon to speak on behalf of the Faculty of Nursing to the wider university community and visa versa. As one of the subjects stated with regard to this matter:

> I am, in a sense, a front man for my Faculty in terms of presenting my Faculty's case to the University but by the same token I am the university spokesman in presenting the case to the Faculty and I guess there is always some conflict in that.

Another of the deans in the study presented her thoughts as follows:

> I think Deans are in a somewhat awkward position being administrators but also being closely associated with the academic unit. So, in a sense you are always wanting to represent the unit's best interests but if you only do that you have a very narrow view of the expectations of the job because every unit is a part of the university so a dean has to have some knowledge, understanding and a feel for the university and what is best collectively for the university. So there is potential for conflict there.

All of the deans concurred that being the intermediary between the university as a whole and the Faculty of Nursing presented the dean with the potential for personal internal conflict and divided loyalties.

Chapter 7

SUMMARY, CONCLUSIONS AND IMPLICATIONS

Summary of the Study

Purpose of the Study

The purpose of this study was to develop a descriptive profile of the administrative work behaviours of deans in Canadian university nursing education programmes. A structured observation field study approach was used to generate a description of the work behaviours of deans of Canadian university nursing education programmes. The study was undertaken in the context of developing insights and generalizations to contribute to the theory base of organizational behaviour in both educational administration and general administration.

Statement of the Problem

The problem addressed in this study was to obtain a description of the characteristics and purposes of the administrative work behaviours of Canadian deans of nursing. The description would indicate what deans of nursing actually do in performing their daily tasks and would identify the purposes of those activities identified through the study.

Sub-Problems

In addressing the primary problem, the following statements served as a guide for the investigation:

1) the classification of observed administrative behaviours of Canadian deans of nursing;
2) the comparison of the administrative behaviours of deans of nursing as described in the literature with those administrative behaviours identified by structured observation;
3) the comparison of the administrative behaviours of Canadian deans of nursing with the administrative behaviours of chief executives as described by Mintzberg (1973);
4) the comparison of the administrative behaviours of Canadian deans of nursing with the administrative behaviours of superintendents as described by Duignan (1979);
5) the formulation of propositions regarding the administrative behaviour of deans of nursing;
6) the generation of hypotheses regarding administrative behaviour relative to general administration theory.

Justification for the Study

The chief administrative officers of the Canadian university nursing education programmes hold key positions in the nation's post-secondary system and influence the nation's health care system. However, the literature reveals little about the administration of universities and even less about the administration of university nursing education programmes. The literature, which is available regarding the administrative behaviour of administrators of university nursing education programmes, focuses on the prescription or advocacy of specific tasks or processes, and on the leadership and decision making components of administration. No studies have been reported which investigated the university administrator's or the university nursing education administrator's daily managerial activities, the purpose of those activities or how those activities compare with the activities of other types of managers. This study used a non-participant, structured observation, field study approach to generate a description of the work behaviours of deans of Canadian university nursing education programmes. This descriptive profile of one group of university administrators provides insights into a previously unexplored aspect of higher education administration by providing information of a qualitative nature.

Research Design

Accepted techniques and methods for structured observation field studies were used in this study to obtain a description of the characteristics and purposes of the administrative work behaviours of Canadian deans of nursing. In field research, classical concepts of research design do not apply. Thus, in conducting this study a three phase process was employed: gaining access to the settings and subjects of the study; collecting descriptive and observational data; and analyzing data including the development of propositions.

Methodology

Five deans of nursing at Canadian universities agreed to permit the investigator to observe them for two periods of three days each. Both descriptive and observational data were collected. The observational data recorded all of the deans' activities throughout their working days and included descriptions of each activity as to duration, participants, location, purpose, format, and initiator of the activity.

Structured interviews with all subjects were conducted at the end of each visit. Concurrent with the recording of descriptions and observations, the researcher also noted recurring patterns or themes in the observations. The resulting thematic notes included hunches, ideas, or suspicions about possible propositions or hypotheses. The thematic notes actually represented the beginning of the analysis.

The data analysis required an iterative process of sorting from which three classification systems evolved: classification of the characteristics of the deans' work (low inference level data), the participants in the deans' work (low inference level data), and the purposes of the deans' work (high inference level data). Profiles of each dean were formulated for each of the three classification systems. Composite and aggregate summaries of the deans' collective activities were prepared for each of the three classification systems. Finally, the observational and descriptive data, the thematic notes, the structured interviews and the composite and aggregated summaries were used to generate a series of propositions concerning the administrative behaviours of deans of nursing.

Conclusions

The small sample size and the qualitative characteristics of the data prohibit the use of statistical treatment of the data for purposes of generalizing to the total population from which the sample was drawn. However, the use of composite totals, the interview transcripts, and molar data permit the administrative behaviour of the Deans of Nursing in this study to be described collectively.

The Dean of Nursing works long days which are filled with many activities of short duration and high intensity. These activities are characterized by frequent interruptions and fragmentation over which the Dean appears to have little control. Most of the dean's working day is spent in joint activities with other individuals, predominantly those from within her own institution. The preferred forms of communication for the deans are those which provide current information and instantaneous feedback, i.e., verbal. Communication via the print media is given relatively low priority in the amount of time the dean devotes to it. Similarly, the Dean of Nursing does not spend any of her time touring the academic institution in which she works.

Definite seasonal variations exist in the administrative behaviours of the Dean of Nursing. The same characteristics, participants and purposes are present at various times of the year but the amount of time and the number of activities required by each category within the three classification systems varies with the time of the year.

The Dean of Nursing devotes a large number of her leadership activities to faculty development. In this study the various Faculties which were involved required information (or instruction) about the universities' curriculum revision processes, budgeting processes, and the concept of collegial governance and shared responsibility. The deans also acted as mentors for individual faculty members on numerous occasions.

The Dean of Nursing makes relatively few unaided decisions related to the Faculty of Nursing. Virtually, all decisions, which are of consequence to the Faculty of Nursing, are made on the basis of the advice of a committee of faculty members. The Dean of Nursing remains responsible for the decisions and probably influences the advice of the committees to some extent. However, collegial governance at Canadian universities limits, to a large extent, the ability of the Dean of Nursing to make unilateral decisions.

Much of the entrepreneurial activity of the Dean of Nursing involves finding or generating alternative sources of funding to extend the Faculty's budget which is allocated from the university. This is not to say that the Dean of Nursing does not engage in entrepreneur behaviours of other sorts, such as curriculum development; rather that, in this period of economic retrenchment and fiscal restraint, the Dean must spend more time and energy on locating sufficient funding for new programmes than she does on the content of the new programmes. Currently the economy is less buoyant, university enrolments are declining, and universities are experiencing fiscal restraint as opposed to the 1960's and early 1970's when growth and expansion were predominant. Most of the previous studies of Deans of Nursing were conducted during the latter period and this might account for the emphasis on the decanal function of curriculum development at that time. Thus, it appears that factors in the external environment, over an extended period of time, might be influencing the manner in which the Dean of Nursing distributes her time and effort among various aspects of entrepreneur behaviours.

The Dean of Nursing currently seems to focus on short-range planning as opposed to long-range planning. Again, this appears to be attributed to the budgetary uncertainty and instability under which most Canadian universities are presently functioning.

The scholarly activities of teaching, research, and writing for publication are deliberately and consciously practised by the Dean of Nursing. This cluster of activities incorporates an entire cluster of behaviours into her job which is extra to the managerial roles which Mintzberg (1973) identified.

The Dean of Nursing occasionally experiences personal conflict arising from her position as senior administrator of the Faculty of Nursing and her position as a member of the senior management team of the university as a whole.

Implications

Implications for Practice

The findings and conclusions of the study which demonstrate the long days filled with activities which are of short duration, high intensity, frequently interrupted, and fragmented might provide some reassurance to administrators of university nursing education programmes that these factors are characteristic of the position rather than being characteristic of the individual in the position. At the same time, selection committees and individuals contemplating accepting decanal appointments in nursing faculties would be well advised to consider the health and temperament of candidates for appointments as Deans of Nursing. Those with poor health or temperaments which prefer uninterrupted concentration on an activity until it is completed will find the hectic pace and the frequent interruptions onerous.

Deans or candidates for deanships who have either experiential or academic preparation (preferably both) in university finance will have a distinct advantage in the competition for secondary sources of funding for their Faculties. The Canadian Association of University Schools of Nursing (C.A.U.S.N.) might be prevailed upon to provide a forum for the continuing professional development of the Canadian deans of nursing who perceive a personal need in this aspect of administration. Alternatively C.A.U.S.N. might serve as a resource for information about alternative funding resources so that an agency or foundation is not inundated with funding requests and another is ignored. Similarly, each Dean of Nursing should consider establishing a file of proposals submitted by faculty members to various agencies. In this way, a pattern of successful grant applications could be established for future reference in grant writing as well as a pattern of funding among various agencies.

Deans of Nursing should not assume that faculty members are familiar with the concepts of collegial governance and shared responsibility or that they share the Dean's perception of these two concepts. Some time spent in a dialogue between faculty and dean would appear to be well spent as a preventive measure against misunderstandings. Similarly, the dean should assure that her own orientation to the university and that of her new faculty members includes some discussion of the processes of and procedures for curriculum revision, budgeting, timetabling, space allocation, and negotiations for clinical placement of students. An up to date Faculty of Nursing policy manual that is available to faculty members and support staff also would prevent many misunderstandings. Policies which are buried in minutes of Faculty meetings are of little use in decision making by either faculty members or deans.

Implications for Further Research

Each of the propositions proposed from this study could be reworded and expressed as an hypothesis upon which deductive research studies could be based. There would also be merit in replicating this study on a different population in order to establish a broader base in order to permit generalization.

The scholarly cluster of activities, which is extra to the managerial roles proposed by Mintzberg (1973), suggests that there are core elements of administration which are universal among all types of administration but that there are also additional elements which are unique to specific types of administration. This position would suggest a compromise between the general theory of administration proposed by Litchfield (1956) and Koontz (1961) and the contingency theories of administration proposed by Fiedler (1967) and House (1971). This would indicate a fruitful area for further administrative research.

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Appendix A

ANGLOPHONE UNIVERSITY NURSING EDUCATION PROGRAMMES IN CANADA HAVING INCUMBENT DEANS

Anglophone University Nursing Education Programmes in Canada Having Incumbent Deans

University	Dean
University of British Columbia Faculty of Nursing	Dr. Marilyn D. Willman Dean
University of Calgary Faculty of Nursing	Dr. Margaret Scott Wright Dean
Lakehead University School of Nursing	Margaret Page Director
Laurentian University School of Nursing	Wendy J. Gerhard Director
McGill University School of Nursing	John M. Gilchrist Director
Memorial University of Newfoundland School of Nursing	Margaret D. McLean Director
University of New Brunswick Faculty of Nursing	Irene Leckie Dean
University of Ottawa Faculty of Health Sciences	Marie des Anges Loyer Director
Queen's University Faculty of Nursing	Alice J. Baumgart Dean
St. Francis Xavier University Department of Nursing	Ellen Murphy Chairman
University of Toronto Faculty of Nursing	Phyllis Jones Chairman
University of Western Ontario Faculty of Nursing	Dr. Beverlee Cox Dean
University of Windsor Faculty of Nursing	Anna Temple Dean

Source: The Canadian Nurse, Vol.76, No.1,
January 1980, pp.36-39.

Appendix B

INITIAL CONTACT LETTER TO SUBJECTS

7 - 130E, Doctoral Suite
Department of Educational
  Administration
Faculty of Education
University of Alberta
Edmonton,, Alberta

March 17, 1980

In partial fulfillment of the requirements for the degree Doctor of Philosophy in Educational Administration at The University of Alberta, Edmonton, I am undertaking a descriptive study of a stratified random sample of the chief administrative officers of Canadian Nursing Education Programmes. You were one of the deans who was randomly selected. The purpose of this letter is to familiarize you with the project and to invite you to consider participation in the study as a subject.

The project proposes a non-participant, observational field study of subjects for two periods of three days' duration. The purpose of the study is to gather data concerning the administrative activities, behaviours, and roles of the Deans, Directors, or Chairmen of Faculties, Schools, or Departments of Nursing at Canadian universities. Your participation would involve permitting me to act as your "shadow" for two periods of three days and responding to a structured interview of approximately one hour duration at the conclusion of each of the two observational periods. Please be assured that the identity of the participants in the study will NOT be disclosed. All observations will be treated with strictest confidence. A copy of the final thesis will be provided to you at the conclusion of the study.

The first round of observational visits will occur April 9 to April 30, 1980. The second round of observational visits will occur during October, 1980.

....2

I will telephone you on March 25, 1980, for the purpose of discussing the project with you and soliciting your participation in the study. An excerpt from the methodology section of my proposal is enclosed to assist you in making your decision. Should you decide in favour of participating, I will also ask you during our telephone conversation to indicate which of the following time periods would be most convenient for me to visit you:

April 9 - 11;
April 14 - 16;
April 17, 18, 21;
April 23 - 25; or
April 28 - 30.

Thank you for considering this request. Hopefully, your response will be affirmative since, as you are well aware, in a random sample from a total population the size of the one in this study, the participation of the selected subjects is crucial to conducting the study. I shall look forward to talking with you on Marh 25, 1980.

Sincerely

Kathryn J. Hannah, R.N., M.S.N.

:kjh
Encl.

Methodology

Operational definitions. For the purpose of this study, the following operational definitions will apply for terms whose meanings might otherwise be ambiguous:

Behaviour -- the conscious thoughts of the subjects as described to the investigator and/or the overt actions of the subjects as perceived by the investigator.

Dean of Nursing -- the senior administrator of the academic unit that is charged with the responsibility for the nursing education programme within the university. The titles Director and Chairman will be considered as synonymous.

University nursing education programme -- the generic course of studies which leads to the conferring of a university degree, either baccalaureate or masters, in nursing.

Faculty of Nursing -- the academic unit that is charged with the responsibility for the nursing education programme within the university. Units known as Departments of Nursing, Schools of Nursing, or Faculty of Health Science will be considered equivalent.

Sample. The sample will be selected from the anglophone university nursing education programmes in Canada having incumbent deans (Appendix A). The sample has been restricted to anglophone programmes because of the cultural variables, and the historical differences in the administrative structures between French-speaking and English-speaking universities. One university nursing education programme will be selected from each of the CAUSN regions, i.e., Atlantic, Quebec, Ontario, Western, in an attempt to negate the effects of regional differences. An additional programme will be selected from the Ontario region because of the larger number and diversity of the programmes in that region (Appendix A). The selection of the representative programme from each region will be made using a table of random numbers. The deans of the programmes selected will constitute the sample for the study.

Observational procedure. The study will be undertaken utilizing a non-participant, structured observation, field study approach as described by Mintzberg (1973) and Duignan (1979). Tentatively, the investigator intends to make two observational visits to each subject. The two visits will be separated by a time interval of several months in order to permit observation of the deans' activities at separate time periods during the academic year. Two visits should permit consideration of temporal influences on decanal administrative behaviour. Each observational visit is tentatively scheduled to be of three days' duration. Thus, a total period of observation for each subject will comprise six days. The research design is illustrated in Figure 2.

Figure 2

Research Design

	Time	
Dean	1	2
A	Observation 1	Observation 6
B	Observation 2	Observation 7
C	Observation 3	Observation 8
D	Observation 4	Observation 9
E	Observation 5	Observation 10

Observations of all the deans' activities throughout the working day will be recorded by the investigator. The recorded observations will describe the activity as to duration, participants, location, purpose, format and initiator of the activity. Recording procedures adapted from Mintzberg (1973) and Duignan (1979) will be utilized. The initial recording and coding process will occur concurrently with the observation process. Two types of data will be recorded and coded: anecdotal data and structured data. Mintzberg (1973:232) defined anecdotal data as "materials on specific activities." Illustrations of this type of data might include tape recordings of structured interviews with the deans, examples of letters, detailed notes of a particular incident including direct quotations. Structured data, according to Mintzberg (1973:232), document "the pattern of activity throughout every minute of the workday and [include] all mail and verbal contacts." These data have been recorded by both Mintzberg (1973) and Duignan (1979) using three types of records -- a chronology record, a mail record, and a contact record. Examples of these types of records can be found in Appendix B. Each of these records will be cross-referenced with each of the others after the pattern established by Mintzberg (1973) and Duignan (1979) (see Appendix B).

Reliability and validity. Lutz and Iannaccone (1969:124) maintained that, in field research, reliable data ordinarily are valid data. They argued that:

> As Kerlinger has said when writing about the field study method, 'There is no complaint of artificiality here.' The observer is viewing the actual behaviour. He is not one step away from the behaviour as is the case when tests are used to measure perceptions of behaviour. Rather, the field observer is looking at the actual

> behaviour. In this method, if the data are reliable, they are usually valid.

Recognizing that, as Duignan (1979:85) points out, "another researcher watching the same behaviours might well produce a different kind of analysis," this investigator will attempt to incorporate measures into the design of the study to enhance its reliability. During the periods of field study the investigator will utilize the non-participant, structured observation methods adapted from Mintzberg (1973) and Duignan (1979). The use of these established recording and coding protocols should provide the first measure of reliability. Additionally, structured interviews with the subjects will be conducted, utilizing the pattern established by Duignan (1979:249-250). A further measure to enhance the intrarater reliability of the study will be pilot observations using videotapes and observations of one dean to test the recording, coding, and interview techniques of the investigator. The final reliability measure will be the use of carefully defined operational definitions of all terminology to be used in the recording and coding process. While interrater reliability is not a concern since the investigator will perform the investigation unassisted, every effort will be made by the investigator to provide intrarater reliability by eliminating personal bias and by maximizing objectivity. Hopefully, informal opportunities will arise that will permit the investigator to check her perceptions with the subjects.

Data analysis. While no hypotheses are being explicitly stated and no inferential statistical procedures are proposed in field research studies, the investigator currently intends to utilize either content analysis or semiotic analysis in sorting and classifying the raw data for individuals and for the sample as a whole. The process under consideration at the present time is the one utilized by Duignan (1979:-70-85). Simultaneously with the analysis, the investigator will attempt to identify trends in the data which might lead to the development of propositions. This aspect of the data analysis, as presently conceptualized by the investigator, will be that proposed by Schatzman and Strauss (1973) and modified by Duignan (1979).

Ethical considerations. Of obvious concern is the matter of the investigator's access to the mail of the subjects without the prior consent of the sender of any specific piece of mail. Before the beginning of the observations, the investigator intends to negotiate with each subject. The specific content and details of mail contents are not relevant to the study. Only the primary purpose of the contact, the title or position of the sender and the action precipitated by the contact need be recorded. Therefore, at the discretion of individual deans, the mail could either be directly viewed for recording purposes by the investigator or verbally reported, as to sender (by title), purpose, and action taken, by the dean to the investigator. Also included in the initial negotiations with the subjects will be the less obvious concern regarding confidential or sensitive discussions with faculty or students. If at any time either a subject of the study or a discussant believes that the presence of a third party would violate confidence or hinder the open and positive nature of a discussion, the investigator is prepared to withdraw from the situation for the duration of the meeting. All subjects will be assured that all activities will be held in strictest confidence by the investigator and that their anonymity will be carefully guarded by the investigator in all reports.

Table 7. The Chronology Record

Time	Medium	Reference[a]	Duration (in hours)
8:20	Call	A	0.02
8:22	Desk work	1-7	0.3
8:40	Unscheduled meeting	B	0.2
8:55	Call	C	0.1
9:00	Scheduled meeting	D	0.5
9:30	Unscheduled meeting	E	0.5
10:00	Desk work	(5)	0.2
10:10	Tour	F	0.1
10:40	Tour	G	0.2
10:45	Call	H	0.2
10:55	Call	I	0.1
11:00	Scheduled meeting	J	2.0
1:00	End of meeting	–	–

[a] Cross references to items in Tables 8 and 9.

Table 8. The Mail Record

Reference	Form	Sender	Purpose	Attention	Action Taken
1	Letter	Trade organization	Request to speak	Read	Reply: decline
2	Clipping	Salesman	Solicitation	Skim	–
3	Letter	External board	Notice of meeting	Read	–
4	Periodical	–	Business news	Skim	Forward advertisement to production supervisor
5	Memo	Foreign vice president	Request resolve staff conflict	Read	Reply: explain
6	Report	Controller	Financial data	Skim	–
7	Letter	R&D vice president	Request signature	–	Sign

Table 9. The Contact Record

Reference	Medium	Purpose	Participants	Initiation	Duration	Place
A	Call	Informed (event)	Manufacturing manager	Opposite	0.02	Office
B	Unscheduled meeting 2	Informed (I.C.)	Assistant	Opposite	0.2	Office
C	Call	Informing (I.C.)	Chairman	Self	0.1	Office
D	Scheduled meeting 3	Ceremony	Retiring employee; Personnel staffer	Opposite (personnel staffer)	0.5	Office
E	Unscheduled meeting 2	Informed (action taken)	Treasurer	Self	0.5	Office
F	Tour	Observation	Plant employees	Self	0.5	Medical plant
G	Tour	Informing (idea)	Assistant superintendent	Self	0.1	Plant
H	Call	Strategy	Executive vice president	Opposite	0.2	Office
I	Call	Informing (decision)	Controller	Self	0.1	Office
J	Scheduled meeting 4	Negotiating	Assistant, consultants	Clock	2.0	Board room

Source: Mintzberg, 1973:235-238.

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Appendix C

LETTER CONFIRMING SUBJECTS' PARTICIPATION

7 - 130E, Doctoral Suite
Department of Educational
Administration
Faculty of Education
University of Alberta
Edmonton, Alberta

March 27, 1980

Dear

Further to my telephone call to your office today, I am writing to confirm your participation in my doctoral research study on the administrative behaviors of Deans of Nursing at Canadian Universities. My first observational visit with you will occur from April to April , 1980 inclusive. I shall arrive at your office at approximately 9:00 a.m. on the first day.

Thank you for your willingness to participate. I shall look forward to sharing this experience with you.

Sincerely,

Kathryn J. Hannah, R.N., M.S.N.

Appendix D

LETTER TO ALTERNATES THANKING THEM FOR CONSIDERING THE REQUEST TO PARTICIPATE IN THE STUDY

7 - 130E, Doctoral Suite
Department of Educational
Administration
Faculty of Education
University of Alberta
Edmonton, Alberta
March 15, 1980

Dear

Further to my telephone call to your office today, I am writing to thank you for considering my request that you consider participating in my doctoral research study of the administrative behaviors of deans of nursing at Canadian universities. I have been able to secure the participation of the required number of subjects to enable me to conduct the study. In spite of the fact that you will not be participating, I would be pleased to supply you with a copy of the completed dissertation, if you would be interested.

Again, my sincere appreciation for time and effort spent on my request. I shall look forward to meeting you at some time in the future.

Cordially,

Kathryn J. Hannah, R.N., M.S.N.

Appendix E

LETTER REQUESTING CONFIRMATION OF SECOND OBSERVATIONAL VISIT

5728 Dalcastle Cres. N.W.
Calgary, Alberta
T3A 1S4
July 3, 1980

Dear

First, my belated thanks for your gracious hospitality as well as your cooperation and candor during my data gathering visit with you. The rest of the tour was equally successful and I finally returned home to Calgary on April 30 -- just in time to begin the Spring Session in Edmonton on May 2! With three courses in a six week session I have yet to begin studying the data but I am looking forward to beginning next week.

My second reason for writing is to ask if it would be convenient for me to make my second observational visit to you on November , , and inclusive. I have waited until after the C.A.U.S.N. Council meeting in the hope that I can visit everyone on the same trip. Could you please let me know if these dates are satisfactory to you?

Again, my sincere appreciation for your participation in my doctoral research project.

Cordially,

Kathryn J. Hannah, R.N., M.S.N.

Appendix F

LETTER ACKNOWLEDGING AND THANKING THE SUBJECTS FOR THEIR PARTICIPATION IN THE PROJECT

5728 Dalcastle Cres. N.W.
Calgary, Alberta
T3A 1S4
December 1, 1980

Dear

I am writing to express my appreciation for your participation as a subject in my doctoral research project on the administrative behaviours of deans and directors of Canadian baccalaureate nursing programmes. Without the participation and cooperation of you and the other four subjects, the project, literally, would not have been possible. An additional benefit was the opportunity to become acquainted with you. I shall look forward to future opportunities to interact with you both personally and professionally.

In my initial contact with you I made a commitment to provide you with a copy of my dissertation when it is completed. I want to assure you that I intend to honour this commitment.

Again, my sincere thnaks for sharing this experience with me.

Cordially,

Kathryn J. Hannah, R.N., M.S.N.

Appendix G

EXAMPLES OF MAIL AND TELEPHONE LOGS

MAIL LOG

Date ______________________
Dean

Code	Source		Correspondant by Title	Type	Purpose	Responsive Action/ Disposition	Duration
	Self	Corr					

TELEPHONE LOG

Date ______________________
Dean

Code	Initiator		Caller's Title	Purpose	Duration	Result
	Self	Caller				

Appendix H

CONTENT OF STRUCTURED INTERVIEWS

Structured Interviews

The questions asked of each dean at the end of the first observational period were as follows:

1. What is your basic administrative philosophy in dealing with your faculty members and support staff?

2. Are there unique features of the health care system in this province which influence your work as dean?

3. Are there unique features of the higher education system in this province which influence your work as dean?

4. Are you often required to represent your Faculty on ceremonial and social occasions?

5. Do various community or professional groups make demands on your time for such things as speaking engagements?

6. Are you expected to be the public relations officer for your Faculty? For the University?

7. Do you try to monitor community moods, expectations, and demands regarding nursing education? Nursing practice? If so, how?

8. What sources of information do you usually use when gathering information and/or seeking advice concerning every day problems? Are there different sources for major issues which develop?

9. What means do you use to disseminate information throughout your Faculty?

10. How often and in what depth do you keep your assistants and/or subordinates informed and briefed about important information?

11. It is sometimes stated that the Dean is caught between the interests of the Faculty and the broader interests of the university. How do you respond to this statement?

12. Is the Dean's position "lonely", in terms of being the one who has to make many of the important decisions and take responsibility for their consequences?

13. Are you often involved in resolving conflict situations? Within the Faculty? Between the Faculty and the University?

14. What are the main pressures of the Dean's job?

15. What are the political activities involved in the deanship?

16. Do you have either formal or informal plans for your Faculty for the next three to five years?

17. Do you continue to teach? If so, what is your motivation?

18. Are you the primary change agent for your Faculty?

19. Do you feel that you are in control of your time?

20. Do the demands of your work interfere with the time that you have available for your private life?

21. Do you get sufficient time on-the-job to think over problems and issues?

22. Many believe that the Dean is usually well paid. How important is salary to you.

23. What would you regard as a promotion?

24. Would you say that the time during which I have been observing you has been typical of your usual activities?

At the end of the second observational visit each of the subjects was shown the Daily Summary Sheet and the accompanying operational definitions which were utilized in analysis of round one data and which are found on the following five pages. Each subject was then asked the following questions:

1. Do the media classifications utilized in summarizing the first round of observations reflect all of the media in your personal repertoire?

2. Does the classification of activities by participants adequately reflect your personal experience?

3. Do the classifications of behaviour identified in the first round of data collection appear to be consistent with your role as Dean?

4. In an organizational sense, how do you perceive the role of students in the faculty/school of nursing? Are they subordinates in the same sense that faculty and support staff are? Are the "raw materials" being processed by the curriculum to produce the product -- B.N. or B.Sc.N.?

5. Do you feel that your work days are "fragmented" i.e. frequent interruptions requiring change of train of thought or inability to complete an activity without distraction by the phone, your secretary, or a visit?

6. Do you believe that much of the information which you use in decision making is verbal or non-documented and therefore makes delegation of decision making difficult?

7. Has the time that I have spent observing your activities during this second visit been typical of your usual activities?

DAILY SUMMARY SHEET

DEAN ________

DURATION OF DAY (in minutes) ____ TOTAL NUMBER OF ACTIVITIES FOR DAY ____

RANGE OF DURATION OF ACTIVITIES FOR DAY ________________________

AVERAGE DURATION OF ACTIVITIES FOR DAY ________________________

CLASSIFICATION OF ACTIVITIES BY MEDIUM:

	Total time spent (in minutes)	Time spent as a % of total day
Mail		
Telephone		
Unscheduled meetings		
Scheduled meetings		
Tours		

CLASSIFICATION OF ACTIVITIES BY PARTICIPANTS:

			Total time (in minutes)	Time spent as a % of total day
Solitary activities				
Joint activities				
	Intra-institutional Participants			
		Subordinates		
		Superordinates		
		Peers		
	Extra-Institutional Participants			
		Professional Association Representatives		
		Representatives of Other Institutions		
		Government Representatives		
		Other (specify)		

DAILY SUMMARY SHEET

ROLES PERFORMED*

	Total time spent (in Minutes)	Time spent as a % of total day
Interpersonal		
Figurehead		
Leader		
Liaison		
Informational		
Monitor		
Disseminator		
Spokesman		
Decisional		
Entrepreneur		
Disturbance Handler		
Resource Allocator		
Negotiator		
Scholarship		
Teacher		
Researcher		
Author		
Other (specify)		

UNCLASSIFIED ACTIVITIES:

	Total time	% of total day
Travel		
Other (specify)		

*See explanation on following pages.

OPERATIONAL DEFINITIONS

CLASSIFICATION OF BEHAVIOURS

I. Interpersonal* - deal primarily with relationships.

1. Figurehead* - symbolic head; obliged to perform a number of duties of a legal or social nature.
   - e.g. ceremony, status requests, solicitations, or authorizations (e.g. grant proposals), submitting forms for leave of absence for faculty member.

2. Leader* - responsible for the motivation and activation of subordinates toward the achievement of the goals of the Faculty of Nursing and the university, responsible for recruiting and staff training, facilitation of subordinates' career development, role modeling, staff development, and associated activities.
   - e.g. counselling faculty regarding their personal graduate education, teaching faculty about university governance or budget process, stimulating faculty research interests, appointments, faculty evaluation.

3. Liaison* - maintenance of a self-developed network (local, provincial, and national) of contacts and information sources who provide favours and information.

II. Informational* - those activities which deal with information processing.

4. Monitor* - Seeks and receives a wide variety of special information (much of it current) to develop a thorough understanding of the organization and its environment; emerges as the nerve centre of internal and external information of the organization.
   - e.g. handling all mail and contacts categorized as concerned primarily with providing information inputs.

5. Disseminator* - Transmits information received from outsiders or from other subordinates to members of the organization; some information factual, some involving interpretation and integration of diverse value positions of organizational influencers in the organizational environment.

* Adapted from Mintzberg, Henry, The Nature of Managerial Work.

- e.g. forwarding mail to organization for informational purposes, verbal contacts involving information flow to subordinates, directing attention of faculty to memos re interviews.

6. Spokesman* - Transmits information to outsiders on organizational plans, policies, actions, results, etc.; serves as the expert on the organization's "industry".
   - e.g. campus-wide committees, representative to government departments or commissions soliciting or accepting briefs, any professional association position in which she acts as the official representative of her faculty (e.g. C.A.U.S.N. Council), responds to unviersity, government or professional association position papers.

III. Decisional* - those activities which involve the making of significant decisions.

7. Entrepreneur* - Searches the organization and its environment for opportunities and initiates "improvement projects" to bring about change; supervises design of certain projects.
   - e.g. appointment of ad hoc study (or advisory) committees, strategy and review sessions involving the initiation of change or the design of improvement projects, i.e. curriculum change, programme modification, policy initiation or major policy modification, analogous to "change agent".

8. Disturbance Handler* - Responsible for corrective action when the organization faces important, unexpected disturbances.
   - e.g. a student appeal or suit against the faculty, student impropriety, tenure appeals, faculty unrest or discontent, budgetary crises, faculty name change.

9. Resource Allocator* - Responsible for the allocation of organizational resources of all kinds - in effect making or approval of all significant organizational decisions.

* Adapted from Mintzberg, Henry, The Nature of Managerial Work.

- e.g. scheduling; requests for authorization of expenditures; all budgeting activities; programming of subordinates' work; student selections, student awards, facilities and space assignments.

10. Negotiator* - Responsible for representing the organization at major negotiations between faculties.
    - e.g. clinical facilities negotiations, establishment of inter-institutional sharing of research resources, preparing contract offers to new faculty, university-wide budget meetings.

IV. Scholarship

11. Teacher - those collected activities which contribute to learning, including communication of information and concepts to students, counseling, evaluation, mentor, etc.

12. Researcher - leading edge of knowledge, development of new knowledge, participation in the discovery of new information either as subject, catalyst, facilitator, principle or co-investigator, resource person, consultant.

13. Author - written communication about matters of concern to the profession. May be of a research, philosophical, or advocacy nature and published in a journal, proceedings of a conference, or address to a professional gathering.

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* Adapted from Mintzberg, Henry, The Nature of Managerial Work.

Appendix I

CODED OBSERVATIONAL RECORD WITH CROSS-INDEXED TELEPHONE AND MAIL LOGS FOR ONE DAY

CODED OBSERVATIONAL RECORD

Dean # ___ Date DD,MM,YYYY

Time	Activity	Code*	Duration	Comments
8:15	Gathers material for class later in day.	dn-od-01	15 minutes	
8:30	Desk - Mail #1.	dn-od-02	10 minutes	
8:40	Places material of class, material for evening T.V. interview and material to work on during class in briefcase.	dn-od-03	15 minutes	
8:55 9:03	Leave for class. Arrives at classroom -- regularly scheduled class with fourth year students.	dn-od-04	8 minutes	
9:05	Begins lecture-discussion class.	dn-od-05	47 minutes	
9:52	Distributes case study, divides class into small groups to work on case study in second hour of class.	dn-od-06	10 minutes	
10:02	Coffee -- informal visit with faculty member in the coffee line.	dn-od-07	3 minutes	
10:05	Consultation with two students regarding clarification and guidance about the completion of term project for this course.	dn-od-08	5 minutes	
10:10	Consultation with one student regarding clarification and guidance about completion of term project.	dn-od-09	2 minutes	
10:12	Consultation with one student regarding clarification and guidance about completion of term project.	dn-od-10	5 minutes	

* dn = dean number; od= date of observation; 01 = unit of observed behaviour, numbered sequentially.

Time	Activity	Code*	Duration	Comments
10:18	Leave coffee room to return to classroom.	dn-od-11	2 minutes	
10:20	Return to classroom. While students work on case study, Dean works on documents for an evaluation in which she will be participating in two weeks.	dn-od-12	7 minutes	
10:27	Student asks question regarding case study; dean responds.	dn-od-13	2 minutes	
10:29	Returns to working on evaluation materials.	dn-od-14	20 minutes	
10:49	Students begin to hand in case studies.			
10:50	Packs up books, erases blackboard.	dn-od-15	1 minute	
10:51	Student asks question regarding clarification of term assignment; Dean responds.	dn-od-16	8 minutes	
10:59 11:10	Leaves classroom to return to office. Arrives at office.	dn-od-17	19 minutes	
11:11	Former support staff member drops in to visit with her new baby.	dn-od-18	1 minute	
11:12	Call #1.	dn-od-19	10 seconds	
11:12	Empties class material from briefcase.	dn-od-20	1 minute	
11:13	Call #2.	dn-od-21	1 minute	
11:14	Mail #2.	dn-od-22	1 minute	
11:15	Briefing of investigator regarding upcoming unscheduled meeting.	dn-od-23	6 minutes	

Time	Activity	Code*	Duration	Comments
11:21	Mail #3.	dn-od-24	3 minutes	
11:24	Unscheduled meeting initiated by faculty member regarding crisis related to the funding of a project within the Faculty. Action resulting -- dean to discuss with university financial officer and get back to faculty member.	dn-od-25	15 minutes	
11:39	Call #3.	dn-od-26	6 minutes	
11:45	Unscheduled appointment with a faculty member returning from study leave; discussed faculty member's leave and programme responsibilities in the Faculty for the coming year.	dn-od-27	15 minutes	
12:00	Leaves for scheduled meeting with fellow deans. Primary agenda item is the university budget for the coming fiscal year (confidential).	dn-od-28	265 minutes	
16:25	Meeting ends.			
16:26	Scheduled meeting with university financial officer regarding dn-od-25. Action resulting -- financial officer will contact funding agency and get back to dean.	dn-od-29	11 minutes	
16:37	Meeting ends. Dean leaves for home.			
18:30	Arrives at T.V. studio for filming of T.V. interview for local programme.	dn-od-30	60 minutes	
19:30	Filming of interview ends. Dean leaves for home.			

Cross-Indexed Telephone and Mail Logs

Mail Log

Dean _____
Date _____

Code	Source Self	Source Corr	Correspondent by Title	Type	Purpose	Responsive Disposition	Duration
1 (dn-od-02)		x	registrar	forms	Dean's registration for an evening session course	completes the forms and puts in outgoing mail	10 mins.
2 (dn-od-22)	x		secretary	memo	requests copies of course submissions for calendar	dictates on dictaphone	1 min.
3 (dn-od-24)		x	faculty member	memo	requests feedback on draft of course evaluation which they co-teach	dictates reply	3 mins.

Telephone Log

Dean _____
Date _____

Code	Initiator	Caller's Title	Purpose	Duration	Result
1 (dn-od-01)	self	university financial officer		30 secs.	line busy
2 (dn-od-21)	caller	faculty member	request to see dean as soon as possible re. problem with funding of a faculty project	1 min.	dean agrees to see her
3 (dn-od-26)	self	university financial officer	seeks advice re. dn-od-25	6 mins.	appointment set for afternoon

Appendix J

DAILY SUMMARY SHEET

DAILY SUMMARY SHEET

DEAN ______________

DAY ______________

DURATION OF DAY (in Minutes) ______________

TOTAL ACTIVITIES FOR DAY ______________

RANGE OF DURATION OF ACTIVITIES FOR DAY ______________

AVERAGE DURATION OF ACTIVITIES FOR DAY ______________

CLASSIFICATION OF ACTIVITIES BY MEDIUM:

	Total Time (in minutes)	Total Units of Activity	Range of Duration of Activities	Time for Activity as % of Total Day	Activity as % of Total Day's Activity
Mail					
Telephone					
Unscheduled Meetings					
Scheduled Meetings					
Tours					

CLASSIFICATION OF ACTIVITIES BY PARTICIPANTS:

Solitary Activities					
Joint Activities					
Intra-institutional					
Superordinates					
Subordinates					
Peers					
Students					
Extra-institutional Representatives					
Professional Associations					
Other Institutions					
Government					
Other (specify)					

CLASSIFICATION OF ACTIVITIES BY PURPOSE:

	Total Time (in minutes)	Total Units of Activity	Range of Duration of Activities	Time for Activity as % of Total Day	Activity as % of Total Day's Activity
Interpersonal					
Figurehead					
Leader					
Liaison					
Informational					
Monitor					
Disseminator					
Spokesman					
Decisional					
Entrepreneur					
Disturbance Handler					
Resource Allocator					
Negotiator					
Scholarship					
Teacher					
Researcher					
Author					
Other (specify)					

UNCLASSIFIED ACTIVITIES:

Travel					
Other (specify)					